

Draft

Environmental Impact Statement Second Main Operating Base KC-46A Beddown at Alternative Air National Guard Installations

Volume II Appendices

VOLUME II

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Appendix A

APPENDIX A RESOURCE DEFINITIONS AND METHODOLOGIES

This appendix provides a definition of each resource described in Chapter 3 and analyzed in Chapter 4 that would be affected by implementation of the various alternatives described in Chapter 2. This appendix also provides a description of the methodologies used in Chapter 4 to analyze the various potential impacts to those resources presented in Chapter 3.

The affected environment is described for 11 resource topics: Noise, Air Quality, Safety, Soils and Water, Biological Resources, Cultural Resources, Land Use, Infrastructure and Transportation, Hazardous Materials and Waste, Socioeconomics, and Environmental Justice and the Protection of Children. The following sections for each resource topic begin with an introduction that defines the resources addressed in the section, summarizes applicable laws and regulations that apply to all installations, defines key terms as necessary, and describes the general region of influence (ROI) within which the effects from implementation of the various alternatives are anticipated to occur. The ROI varies from resource to resource, but in general, effects from the proposed activities are expected to be concentrated around each of the alternative installations. A more specific ROI for each installation/resource is described within Chapter 3, as are any local/regional regulations. The methodology used in Chapter 4 to analyze potential impacts for each resource follows the definition of the resource sections in this appendix.

A.1 NOISE

A.1.1 Definition of the Resource

Noise is considered to be unwanted sound that interferes with normal activities or otherwise diminishes the quality of the environment. It may be intermittent or continuous, steady or impulsive, stationary or transient. Stationary sources are normally related to specific land uses (e.g., housing tracts or industrial plants). Transient noise sources move through the environment, either along relatively established paths (e.g., highways, railroads, and aircraft flight tracks around airports) or randomly. There is wide diversity in responses to noise that not only vary according to the type of noise and the characteristics of the sound source, but also according to the sensitivity and expectations of the receptor, the time of day, and the distance between the noise source (e.g., an aircraft) and the receptor (e.g., a person or animal). The duration of a noise event, and the number of times noise events occur, are also important considerations in assessing noise impacts.

As a basis for comparison when noise levels are considered, it is useful to note that at distances of about 3 feet, typical kitchen appliances range from about 83 to 88 decibels (dB), rock bands approach 110 dB, and normal conversation from about 3 feet would be approximately 60 dB. Figure C-2 in Appendix C depicts typical A-weighted sound pressure levels for various common sources.

A.1.1.1 Noise Metrics

To assess noise impacts in the vicinity of each installation, the United States Air Force (USAF) has used both a cumulative metric, known as the Day-Night Average Sound Level (DNL), and a single event metric, known as the Sound Exposure Level (SEL). DNL is used to analyze a community's exposure to noise while SEL is useful in describing what an individual might experience on the ground as an aircraft passes by and to assess potential for sleep disturbance and interference with activities. SEL is used to assess the potential impacts of noise on structures and animals. Appendix C provides more detailed information regarding noise and the analysis of impacts from changes to the noise environment.

The frequency, sound level, and duration of aircraft overflight noise events depend on variables including aircraft type and model (engine type), aircraft configuration (i.e., flaps, landing gear, etc.), engine power setting, aircraft speed, distance between the observer and the aircraft flight track, temperature, humidity, and altitude. Therefore, extensive noise data are collected for various types of aircraft/engines at different power settings and phases of flight. This database of aircraft noise provides a basis for calculation of average individual-event sound descriptors for specific aircraft operations at any location under varying meteorological conditions. The reference values are adjusted to any location by applying appropriate corrections for the variables.

Averaged Noise Metrics

DNL is a composite metric that accounts for all noise events in a 24-hour period. In order to account for increased human sensitivity to noise at night, a 10 dB penalty is applied to nighttime events (10 p.m. to 7 a.m.). This "noise penalty" is an effort to account for increased human sensitivity to late night noise events. The summation of sound during a 24-hour period does not ignore the louder single events; it actually tends to emphasize both the sound level and number of those events. The logarithmic nature of the dB unit causes sound levels of the loudest events to control the 24-hour average.

DNL is the accepted unit for quantifying annoyance to humans from general environmental noise, including aircraft noise. The Federal Interagency Committee on Urban Noise (FICUN) developed land use compatibility guidelines for noise exposure areas (FICUN 1980). Based upon these FICUN guidelines, the Federal Aviation Administration (FAA) developed recommended land uses in aircraft noise exposure areas. The USAF and FAA use DNL as the method to estimate the amount of exposure to aircraft noise and predict impacts. Land use compatibility and incompatibility are determined by comparing the predicted DNL at a site with the recommended land uses (Appendix C).

A.1.1.2 Noise Modeling

There are a variety of tools available to model noise at and around airfields. NOISEMAP is a computer program used to model noise exposure in the vicinity of military airfields due to aircraft flights and engine run-up activities. Noise contours generated by NOISEMAP are used in support of the USAF Air Installation Compatible Use Zone (AICUZ) program and National Environmental Policy Act (NEPA) documentation, such as this Environmental Impact Statement (EIS). The model generates noise contours based on numerous input data that are used to evaluate noise in the vicinity of airfields where military activity occurs. Part 150 of the Federal Aviation Regulations (FAR), *Airport Noise Compatibility Planning*, sets forth standards for airport operators to use in documenting noise exposure in the civilian airport environs and establishing programs to minimize noise-related land use incompatibilities. The FAA uses the Integrated Noise Model (INM), a computer model that evaluates aircraft noise impacts in the vicinity of commercial airports.

A.1.1.3 Potential Hearing Loss

Noise-related hearing loss risk has been studied extensively. Findings of studies and resulting policies and regulations are discussed briefly below and in more detail in Appendix C. As per Department of Defense (DoD) policy memorandum (2009) populations exposed to noise greater than 80 dB DNL are at the greatest risk of potential hearing loss (Undersecretary of Defense for Acquisition Technology and Logistics 2009). The DoD policy directs that hearing loss risk should be assessed using the methodology described in United States Environmental Protection Agency (USEPA) Report No. 550/9-82-105, *Guidelines for Noise Impact Analysis* (USEPA 1982). USEPA's *Guidelines for Noise Impact Analysis* quantify hearing loss risk in terms of Noise-Induced Permanent Threshold Shift (NIPTS), a quantity that defines the permanent change in the threshold level below which a sound cannot be heard. NIPTS is stated in terms of the average threshold shift at several frequencies that can be expected from daily exposure to noise over a normal working lifetime of 40 years, with exposure lasting 8 hours per day for 5 days per week.

The actual value of NIPTS for any given person depends on that individual's physical sensitivity to noise. Over a 40-year working lifetime, some people will experience more loss of hearing than others. The actual noise exposure for any person living in an area subject to 80 dB DNL or greater is determined by the length of time that a person is outdoors and directly exposed to the noise. For example, noise exposure within an 80 dB DNL noise contour near an airfield would be affected by whether a person was at home during the daytime hours when most flying occurs. Many people would be inside their homes and would, therefore, be exposed to lower noise levels due to noise attenuation provided by the house structure.

Workplace Noise

In 1972, the National Institute for Occupational Safety and Health (NIOSH) published a criteria document with a recommended exposure limit of 85 dB as an 8-hour time-weighted average. This exposure limit was reevaluated in 1998 when NIOSH made recommendations that went beyond conserving hearing by focusing on the prevention of occupational hearing loss (NIOSH 1998). Following the reevaluation using a new risk assessment technique, NIOSH published another criteria document in 1998 that reaffirmed the 85 dB recommended exposure limit (NIOSH 1998). Active-duty and reserve components of the USAF (including the Air National Guard [ANG]), as well as civilian employees and contracted personnel working on USAF bases and ANG installations must comply with Occupational Safety and Health Administration (OSHA) regulations (29 Code of Federal Regulations [CFR] § 1910.95 Occupational Noise Exposure), DoD Instruction 6055.12, Hearing Conservation Program; Air Force Occupational Safety and Health (AFOSH) Standard 48-20 (June 2006), and Occupational Noise and Hearing Conservation Program (including material derived from the International Standards Organization 1999.2 Acoustics-Determination of Occupational Noise Exposure and Estimation of Noise Induced Impairment). Per AFOSH Standard 48-20, the Hearing Conservation Program is designed to protect workers from the harmful effects of hazardous noise by identifying all areas where workers are exposed to hazardous noise. The following are the primary components of the program:

- 1. Identify noise hazardous areas or sources and ensure these areas are clearly marked.
- 2. Use engineering controls as the primary means of eliminating personnel exposure to potentially hazardous noise. All practical design approaches to reduce noise levels to below hazardous levels by engineering principles shall be explored. Priorities for noise control resources shall be assigned based on the applicable risk assessment code. Where engineering controls are undertaken, the design objective shall be to reduce steady-state levels to below 85 dB, regardless of personnel exposure time, and to reduce impulse noise levels to below 140 dB peak sound pressure level.

- 3. Ensure workers with an occupational exposure to hazardous noise complete an initial/reference audiogram within 30 days from the date of the workers' initial exposure to hazardous noise.
- 4. Ensure new equipment being considered for purchase has the lowest sound emission levels that are technologically and economically possible and compatible with performance and environmental requirements. 42 United States Code (USC) Section 4914, Public Health and Welfare, Noise Control, Development of Low-Noise Emission Products, applies.
- 5. Education and training regarding potentially noise hazardous areas and sources, use and care of hearing protective devices, the effects of noise on hearing, and the Hearing Conservation Program.

A.1.2 Methodology

A.1.2.1 Aircraft Noise

Noise associated with flying operations and construction activities related to the Proposed Action are considered and compared with baseline conditions to assess potential impacts. Data developed during this process also supports analyses in the biological, cultural, land use, and environmental justice and the protection of children resource areas. When analyzing noise effects on humans, public annoyance is the most common impact associated with exposure to elevated noise levels, and the DNL noise metric has been strongly correlated to public annoyance. When subjected to a DNL of 65 dB, approximately 12 percent of the persons exposed would be expected to be "highly annoyed" by the noise (Finegold *et al.* 1994). At levels below 60 dB DNL, the percentage of annoyance is substantially lower (less than 8 percent), and at levels above 70 dB DNL it is substantially higher (approximately 25 percent) (Table A.1.2-1). A 75 dB DNL is also the threshold above which effects other than annoyance may occur (Committee on Hearing, Bioacoustics, and Biomechanics 1977). According to USAF land use guidelines, 65 dB DNL is the highest aircraft noise level that is normally compatible with residential uses (FICUN 1980). Even with special noise attenuation measures installed, residential developments are never considered to be compatible with a DNL of 75 dB or higher.

Table A.1.2-1. Theoretical Percentage of Population Highly Annoyed by Noise Exposure

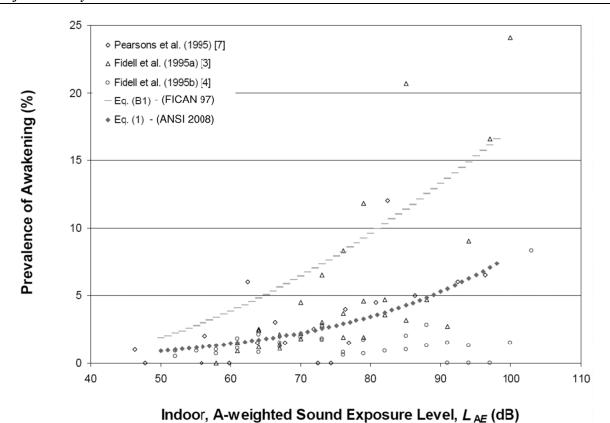
DNL Intervals in dB	Percentage of Persons Highly Annoyed
<65	<12
65-70	12-22
70-75	22-37
75-80	37-54
>80	>61

Note: Noise impacts to individuals vary as do individual reaction to noise. This is a general prediction of the percent community highly annoyed based on environmental noise surveys conducted around the

dB = decibel; DNL = Day-Night Average Sound Level

Source: Finegold et al. 1994.

Sleep disturbance is often considered an adverse reaction from aircraft operations in the vicinity of an airport. While there are currently no established criteria for evaluating sleep disturbance from aircraft overflights, recent studies suggest setting the threshold of outdoor SEL of 90 dB, an indoor SEL of 65 dB (25 dB lower) when windows are closed, and an indoor SEL of 75 dB (15 dB lower) when windows are open (DNWG 2009). Figure A.1.2-1 depicts the prevalence of awakening based on indoor SELs. This analysis is based on the change in aircraft operations resulting from the conversion of the KC-135 to the KC-46A. The total number of operations flown by all other aircraft would not change and sleep disturbance from those activities would remain as they are today. For this analysis, the number of late night (10:00 p.m. to 7:00 a.m.) aircraft operations occurring on an average day are reported as the number of times humans living in the vicinity of the airport could experience changes to sleep disturbance.



Source: ANSI S12.9-2008 Plot of Sleep Awakening Data versus indoor SEL

Figure A.1.2-1. Prevalence of Awakening

Speech Interference is a primary cause for annoyance and often leads to disruption of routine activities such as listening to the radio or television, using a telephone or having conversations. The quality of speech communication is also linked to disruption of classrooms and the potential for adverse effects on children's learning ability. Those areas where speech interference occurs from current KC-135 aircraft operations would be expected to continue with the beddown of the KC-46A. This analysis is based on the change in aircraft operations resulting from the conversion of the KC-135 to the KC-46AA. The total number of operations flown by all other aircraft would not change and speech interference from those activities would remain as they are today. For this analysis, the number of all aircraft operations occurring on an average day are reported as the change in the number of times speech interference could occur in the vicinity of the airport.

For the purposes of this EIS, the significance of potential noise impacts is based on the noise sensitivity in areas affected by substantially increased noise levels under the Proposed Action. Generally, noise impacts could be considered significant if they would:

• increase in DNL by greater than 1.5 dB at one or more noise sensitive locations (e.g., residential areas) within the 65 dB DNL noise contour;

- newly expose noise-sensitive land uses, such as residential areas, to noise levels at which
 they are not considered to be compatible without sound attenuation (at or above 65 dB
 DNL), according to federal land use guidelines; and
- increase noise levels at any facility to a point at which current functions could not be carried out efficiently.

Actual noise measurements for the KC-46A have not been obtained. Therefore, the USAF developed a set of noise data that can be used as a substitute for the KC-46A until such time as actual noise data becomes available. This data is not available in the INM program; therefore, the B767-300 was used as a substitute aircraft at civilian airports. Based on this substitute data, on a one-to-one basis, the KC-46A is slightly quieter than both the KC-135 and B767-300 (Table A.1.2-2).

Table A.1.2-2. Aircraft Noise Level Comparison

	Power	SEL (dB) AT OVERFLIGHT ALTITUDE IN FEET			
Aircraft	Setting	1,000 feet	2,000 feet	5,000 feet	10,000 feet
	Landing				
KC-46A	60% N1	85	79	70	61
KC-135	65% NF	90	84	75	67
B767-300	12,000 lbs	89	83	76	67
Takeoff					
KC-46A	92% N1	96	88	78	69
KC-135	90% NF	95	91	81	73
B767-300	33,000 lbs	95	90	80	74

Notes: Power Setting nomenclature is based on the instruments available in each aircraft.

Power Unit: lbs = Pounds of Thrust; NF = Engine Fan; N1 = Engine Speed

Standard Atmospheric Data, airspeeds normalized to 160 knots indicated airspeed.

Sources: NOISEMAP 7 Omega 10 Results; INM 2007.

Baseline and proposed noise contours were developed using the noise model that was used to generate the most current noise contour for each installation. For Joint Base McGuire-Dix-Lakehurst (JB MDL) and Forbes Air National Guard Station (ANGS), noise modeling was completed using the NOISEMAP program, and for Pease ANGS, Pittsburgh ANGS, and Rickenbacker ANGS, the FAA's INM model was used. Where NOISEMAP was used, the USAF-developed KC-46A substitute noise data was used. At airports where INM was used, the KC-46A was modeled using the B767-300 as the substitute aircraft. The KC-46A is a militarized version of the B767-300 with both aircraft powered by two Pratt and Whitney PW4062 turbofan engines. Information specific to each location is presented in Chapter 3 of each alternative.

There are a variety of data that are input into the NOISEMAP and INM computer programs to develop noise contours, and include such variables as: physical description of the airport, number and mix of aircraft operations, aircraft configurations (engine power, airspeed, altitude), day-night split of operations (by aircraft type), runway utilization rates, prototypical flight track

descriptions, and flight track utilization rates. This information by type of aircraft/engine and meteorological variables are assembled and processed for input into either the NOISEMAP or INM programs. Contours are generated as 5 dB intervals beginning at 65 dB DNL. DNL less than 65 dB are considered unconditionally compatible with residential land use (see Table A.1.7-1). While there is no technical reason why a at or above a DNL 65 dB cannot be measured or calculated for comparison purposes, this DNL provides a valid basis for comparing and assessing community noise effects, and when in the airport vicinity, represents a noise exposure level that is normally dominated by aircraft noise rather than other community or nearby highway noise sources.

A.1.2.2 Construction Noise

Construction noise is generated by the use of heavy equipment on job sites and is short-term in duration (i.e., the duration of the construction period). Typical noise levels from heavy equipment range from 69 to 84 dB at 100 feet from the source (FHA 2006). Noise from construction would be temporary and construction projects would be undertaken adjacent to the flightline away from any off-base communities. Construction noise would be expected to be contained within base environs and therefore has not been carried forward for detailed analysis in this EIS.

A.2 AIR QUALITY

A.2.1 Definition of Resource

Ambient air quality refers to the atmospheric concentration of a specific compound that occurs at a particular geographic location. The ambient air quality levels measured at a particular location are determined by the interactions of emissions, meteorology, and chemistry. When discussing air quality, it is important to consider the types, amounts, and locations of pollutants emitted into the atmosphere. Meteorological factors that affect air quality include wind and precipitation patterns that can affect the distribution, dilution, and removal of pollutant emissions from the atmosphere. Furthermore, chemical reactions in the atmosphere can transform pollutant emissions into other chemical substances. Ambient air quality data are generally reported as a mass per unit volume (e.g., micrograms per cubic meter $[\mu g/m^3]$ of air) or as a volume fraction (e.g., parts per million [ppm] by volume).

Air quality is defined by ambient air concentrations of specific pollutants determined by the USEPA to be of concern with respect to the health and welfare of the general public. Pollutant emissions typically refer to the amount of pollutants or pollutant precursors introduced into the atmosphere by a source or group of sources. Pollutant emissions contribute to the ambient air concentrations of criteria pollutants, either by directly affecting the pollutant concentrations

measured in the ambient air or by interacting in the atmosphere to form criteria pollutants. Primary pollutants, such as carbon monoxide (CO), sulfur dioxide (SO₂), lead (Pb), and some particulates, are emitted directly into the atmosphere from emission sources.

Secondary pollutants, such as ozone (O_3) , nitrogen dioxide (NO_2) , and some particulates, are formed through atmospheric chemical reactions that are influenced by meteorology, ultraviolet light, and other atmospheric processes. Suspended particulate matter less than or equal to 10 microns in diameter (PM_{10}) and particulate matter less than or equal to 2.5 microns in diameter $(PM_{2.5})$ are generated as primary pollutants by various mechanical processes (for example, abrasion, erosion, mixing, or atomization) or combustion processes. However, PM_{10} and $PM_{2.5}$ can also be formed as secondary pollutants through chemical reactions or by gaseous pollutants that condense into fine aerosols. In general, emissions that are considered "precursors" to secondary pollutants in the atmosphere (such as volatile organic compounds [VOCs] and oxides of nitrogen $[NO_x]$, which are considered precursors for O_3) are the pollutants for which emissions are evaluated to control the level of O_3 in the ambient air.

The ROI for this discussion can vary according to pollutant. For pollutants that do not undergo a chemical reaction after being emitted from a source (i.e., direct emissions), the ROI is generally restricted to a region in the immediate vicinity of the installation. These pollutants include CO, SO₂, and directly-emitted PM₁₀ and PM_{2.5}. For pollutants that undergo chemical reactions and interact within the atmosphere to form secondary pollutants, such as O₃ and its precursors NO_x and VOCs, and precursors of PM₁₀ and PM_{2.5}, the ROI is a larger regional area. The chemical transformations and interactions that create O₃ and secondary PM₁₀ and PM_{2.5} can take hours to occur; therefore, the precursor pollutants may be emitted some distance from the impact area depending on weather conditions.

Mixing height is another factor used in defining the ROI for various pollutants. The mixing height is the upper vertical limit of the volume of air in which emissions may affect air quality. Emissions released *above* the mixing height are typically restricted from affecting ground level ambient air quality in the region, while emissions of pollutants released *below* the mixing height may affect ground level concentrations. The portion of the atmosphere that is completely mixed begins at ground level and may extend up to heights of a few thousand feet. Mixing height varies from region to region based on daily temperature changes, amount of sunlight, and other climatic factors. The USEPA has defined a default mixing height as 3,000 feet above ground level (AGL); however, a more refined mixing height may be used based on regional parameters. The specific ROI for each installation is discussed under each alternative location section.

A.2.2 Regulatory Setting

A.2.2.1 National Ambient Air Quality Standards

As part of the Clean Air Act (CAA), the USEPA has established criteria for seven major pollutants of concern, called "criteria pollutants." These criteria pollutants include CO, SO₂, NO₂, O₃, PM₁₀, PM_{2.5}, and Pb. The criteria set for these pollutants, the National Ambient Air Quality Standards (NAAQS), represent maximum levels of background pollution that are considered safe, with an adequate margin of safety to protect the public health and welfare. Based on measured ambient criteria pollutant data, the USEPA designates areas in the United States (U.S.) as having air quality better than (attainment) or worse than (nonattainment) the NAAQS.

Once a nonattainment area meets the standards and additional redesignation requirements in the CAA (Section 107(d)(3)(E)), USEPA will designate the area as a "maintenance area." Maintenance areas are subject to the requirements of maintenance plans that are designed to ensure that the area continues to meet the standards. A maintenance area remains subject to the General Conformity Rule.

A.2.2.2 Prevention of Significant Deterioration

The CAA also established a national goal of preventing degradation or impairment in federally designated Class I areas. Class I areas are defined as those areas where any appreciable degradation in air quality or associated visibility impairment is considered significant. As part of the Prevention of Significant Deterioration (PSD) Program, Congress assigned mandatory Class I status to all national parks, national wilderness areas (excluding wilderness study areas or wild and scenic rivers), and memorial parks greater than 5,000 acres. In Class I areas, visibility impairment is defined as atmospheric discoloration (such as from an industrial smokestack), and a reduction in regional visual range. Visibility impairment or haze results from smoke, dust, moisture, and vapor suspended in the air. Very small particles are either formed from gases (sulfates, nitrates) or are emitted directly into the atmosphere from sources like electric utilities, industrial processes, and vehicle emissions. Stationary sources are regulated under the PSD Program, and the PSD permitting process requires a review of impacts to all Class I areas within 62 miles (100 kilometers) of any proposed major stationary source. Mobile sources, including aircraft and associated operations such as those occurring at the alternative ANG installations being considered under this Proposed Action, are not subject to the requirements of PSD.

A.2.2.3 Hazardous Air Pollutants

In addition to criteria pollutants, the USEPA has defined 187 substances as hazardous air pollutants (HAPs). HAPS are substances that have been determined to present some level of

acute or chronic health risk (cancer or non-cancer) to the general public. These pollutants may be emitted in trace amounts from various types of sources, including combustion sources. HAPs are regulated for specific source categories under the USEPA's *National Emission Standards for Hazardous Air Pollutants* regulations.

A.2.2.4 Greenhouse Gases

Greenhouse gases (GHGs) are also regulated under the federal CAA. The USEPA defines GHGs as any of the following compounds: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases such as hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHGs have varying global warming potential (GWP). The reference gas for GWP is CO₂; therefore, CO₂ has a GWP of 1. The other main GHGs that have been attributed to human activity include CH₄, which has a GWP of 21, and N₂O, which has a GWP of 310. Carbon dioxide equivalent (CO₂e) emissions are defined as the amount of CO₂ that would have the same GWP, when measured over a specified timescale (generally, 100 years). CO₂e emissions are calculated by multiplying the mass emissions by the GWP.

A.2.2.5 State Implementation Plan

Individual states are delegated the responsibility to regulate air quality in order to achieve or maintain air quality in attainment with these standards. Each state enforces air pollution regulations and sets guidelines to attain and maintain the NAAQS and state Ambient Air Quality Standards (AAQS) within each respective state associated with the Proposed Action; these guidelines are found in each state's State Implementation Plan (SIP).

Some of the state AAQS are more stringent than the NAAQS, which translates into more emissions reductions generally within the region being required to show that it has attained an applicable AAQS than will be required to show its attainment of the comparable NAAQS.

Section 176(c) of the CAA, as articulated in the USEPA General Conformity Rule, states that a federal agency cannot issue a permit for or support an activity unless the agency determines that it will conform to the most recent USEPA-approved SIP. This means that projects using federal funds or requiring federal approval must not: 1) cause or contribute to any new violation of a NAAQS, 2) increase the frequency or severity of any existing violation, or 3) delay the timely attainment of any standard, interim emission reduction, or other milestone. If emissions of one or more of these compounds exceed a *de minimis* threshold, the USAF must demonstrate conformity under one of the methods prescribed by the General Conformity Rule.

A.2.3 Methodology

The Proposed Action involves both the beddown of the KC-46A aircraft and its operational emissions, construction of new facilities to accommodate the new aircraft, and emissions related to a minor change in personnel commuting to the alternative installations. Environmental consequences to air quality were evaluated to assess whether degradation in air quality would be anticipated from implementation of the Proposed Action at any of the alternative installations. Air quality impacts from the KC-46A beddown were reviewed for significance relative to federal, state, and local air pollution standards and regulations. In the case of criteria pollutants for which the ROI is in attainment of the NAAQS, the analysis used the PSD threshold for new major sources of 250 tons per year (tpy) of that pollutant as an indicator of significance or nonsignificance of projected air quality impacts. In the case of criteria pollutants for which the project region does not attain an NAAQS or is in a maintenance area, the analysis used the pollutant threshold that triggers a conformity determination (the *de minimis* threshold) under the General Conformity Rule. If proposed emissions exceed a PSD threshold for attainment pollutants or a *de minimis* threshold for nonattainment pollutants, further analysis was conducted to determine whether impacts would be significant. In such cases, if emissions attributable to the Proposed Action (1) do not contribute to an exceedance of an ambient air quality standard, or (2) conform to the approved SIP, air quality impacts would be less than significant.

Factors needed to derive construction source emission rates were obtained from the *Compilation of Air Pollutant Emission Factors*, AP-42, Volume I (USEPA 1995), the USEPA NONROAD 2008a model for nonroad construction equipment (USEPA 2009), and the USEPA MOVES 2010b model for on-road vehicles (USEPA 2013b).

The Proposed Action would include construction activities at the alternative installations. Emissions associated with construction were calculated using construction source emission rates from the *Compilation of Air Pollutant Emission Factors*, AP-42, Volume I (USEPA 1995), the USEPA NONROAD2008 model for nonroad construction equipment (USEPA 2009), and the emission factors for vehicles from the Air Force Civil Engineer Center (AFCEC) *Air Emissions Guide for Air Force Mobile Sources* (AFCEC 2013) to calculate emissions from fugitive dust, construction equipment, and vehicles. Appendix D includes data and assumptions used to calculate proposed construction emissions.

Air quality impacts from construction would occur from (1) combustion emissions due to the use of fossil fuel-powered equipment and vehicles, and (2) fugitive dust emissions (PM_{10}) during demolition activities, earth-moving activities, and the operation of equipment on bare soil. Fugitive dust emissions were calculated based on the total site disturbance projected for each construction project for all construction years. Equipment usage was based on similar construction projects to estimate project combustion and fugitive dust emissions.

Inclusion of standard construction practices and Leadership in Energy and Environmental Design (LEED) certification level of Silver into proposed construction activities would minimize air quality impacts from proposed construction activities. For example, the analysis reduced fugitive dust emissions generated from the use of construction equipment on exposed soil by 50 percent from uncontrolled levels to simulate implementation of standard construction practices for fugitive dust control.

These standard construction practices for fugitive dust control include the following.

- Use water trucks to keep areas of vehicle movement damp enough to minimize the generation of fugitive dust.
- Minimize the amount of disturbed ground area at a given time.
- Suspend all soil disturbance activities when winds exceed 25 miles per hour or when visible dust plumes emanate from the site and stabilize all disturbed areas with water application.
- Designate personnel to monitor the dust control program and to increase watering, as necessary, to minimize the generation of dust.

Operational emissions associated with each alternative associated with the Proposed Action include emissions associated with aircraft operations and associated equipment. Mobile source emissions include emissions from aircraft operations (take-offs and landings), aerospace ground equipment (AGE), privately owned vehicle (POV) operations, and maintenance aircraft operations performed with the engines still mounted on the aircraft (engine run-ups and trim checks). Air quality impacts associated with the Proposed Action for the KC-46A aircraft were assessed by comparing the projected net emissions associated with KC-46A operations with emissions associated with existing operations for the KC-135 aircraft. Emissions evaluated for both the baseline and the Proposed Action at each alternative installation include (1) aircraft operations; (2) POVs, (3) engine run-ups, and (4) AGE use. It was assumed that there would be no net change in use of government motor vehicles (GMVs), construction (outside of the construction activities associated with the Proposed Action), or stationary sources. Emissions from these categories of sources were calculated based on guidance from the USAF in their Air Emissions Guide for Air Force Mobile Sources (AFCEC 2013) utilizing the latest air emissions modeling tools. Factors used to calculate combustive emissions for the KC-46A aircraft are based on emissions data developed by Pratt and Whitney for the PW4062 engine (International Civil Aviation Organization 2013). The operational times in mode for the KC-46A and KC-135 engines are based on those currently used for the KC-135 aircraft in the Air Emissions Guide for Air Force Mobile Sources (AFCEC 2013). A detailed description of the methodology and assumptions used for each source category is provided in Appendix D.

There are no final guidelines for discussing the potential GHG impacts in Environmental Impact Analysis Process documents. The Council on Environmental Quality (CEQ) proposed draft guidance for public comment and review on February 18, 2010, but this draft has never been formally adopted by CEQ. Given the global nature of climate change and the current state of the science, it is not useful at this time to attempt to link the emissions quantified for local actions to any specific climatological change or resulting environmental impact. Nonetheless, the GHG emissions from the project alternatives have been quantified to the extent feasible in this EIS for information and comparison purposes.

A.3 SAFETY

A.3.1 Definition of Resource

The USAF manages risk as outlined in Air Force Instruction (AFI) 90-802 *Risk Management* (USAF 2013a). Requirements defined in this document provide a process to maintain readiness in peacetime and achieve success in combat while safeguarding people and resources. The safety analysis contained in this EIS addresses issues related to the health and well-being of both military personnel and civilians living in the vicinity of the alternative airfields. Specifically, this section provides information on both ground and flight safety. Ground safety includes discussions of fire/crash response capabilities, Accident Potential Zones (APZs)/Runway Protection Zones (RPZs), explosive safety, and Anti-Terrorism/Force Protection (AT/FP). Flight safety includes discussions on flight safety procedures, aircraft mishaps, bird/wildlife aircraft strike hazards (BASH), and fuel jettison requirements.

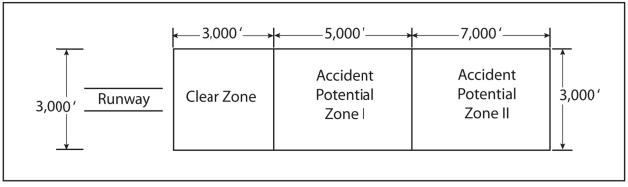
A.3.1.1 Ground Safety

Fire/Crash Response

Military airfields present special hazards to rescue and response personnel. Due to the nature of combustibles involved in an aircraft crash, and the physical forces that are experienced, strategic priorities differ from other types of firefighting scenarios. In Aircraft Rescue and Fire Fighting (ARFF), the emphasis is more heavily weighted toward rescue than in structural firefighting. The rule of thumb is initially to fight only the fire that interferes with the rescue. Under the DoD Instruction 6055.6, *DoD Fire and Emergency Services Program*, each military airport is required to have a dedicated rescue team composed of trained fire fighters whose mission includes specific aircraft rescue tasks. Military airports are equipped with rescue vehicles staffed by ARFF personnel using state-of-the-art rescue tools.

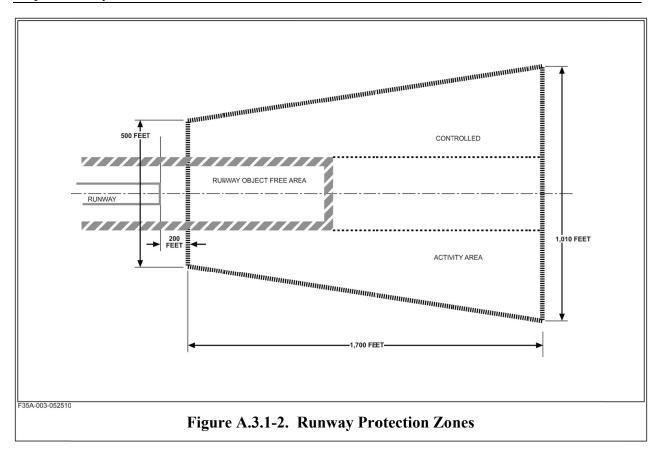
Accident Potential Zone/Runway Protection Zone

Clear Zones and APZs/RPZs are established at military and civilian airfields to delineate recommended surrounding land uses for the protection of people and property on the ground. Clear Zones and APZs define the areas in the vicinity of a military airfield that would have the highest potential to be affected if an aircraft mishap were to occur. The Clear Zone extends 3,000 feet by 3,000 feet off the end of the runway, followed by a 3,000-foot by 5,000-foot APZ I, and a 3,000-foot by 7,000-foot APZ II (Figure A.3.1-1) (DoD Instruction 4165.57, 2011). Similar to APZs, but used at civilian airports, RPZs are trapezoidal zones extending outward from the ends of active runways at commercial airports, and as with APZs, delineate those areas recognized as having the greatest risk of aircraft mishaps, most of which occur during take-off or landing. Development restrictions within RPZs are intended to discourage incompatible land use activities from being established in these areas. The RPZ dimension for a particular runway end is a function of the type of aircraft and minimum approach visibility associated with that runway end. For most commercial airports (e.g., Rickenbacker or Pittsburgh International Airport [IAP]) with large aircraft, the departure RPZ begins 200 feet from the end of the runway and continues out to 1,700 feet, with a width beginning at 500 feet and expanding as the distance from the runway increases to 1,010 feet wide (FAA 2009). The approach RPZ begins 200 feet before the runway threshold and extends out 1,700 feet in a reverse of the departure RPZ (Figure A.3.1-2) (FAA 2009).



Source: DoD 2011.

Figure A.3.1-1. Accident Potential Zones



Explosive Safety

Quantity-distance (QD) arcs define levels of risk considered acceptable for potential explosive sites. Separation distances are buffers that provide relative protective or safe distances. QD standards were developed over many years and are based on explosives mishaps and tests. All ordnance is handled and stored in accordance with USAF explosive safety directives (AFI 91-201), and all munitions maintenance is carried out by trained, qualified personnel using USAF-approved technical data.

Anti-Terrorism/Force Protection

AT/FP standards seek effective ways to minimize the likelihood of mass casualties from terrorist attacks against DoD personnel in the buildings in which they work and live. These standards provide minimum levels of protection against terrorist attacks for the occupants of all DoD inhabited buildings. They are intended to be used by security and anti-terrorism personnel and design teams to identify the minimum requirements that must be incorporated into the design of all new construction and major renovations of inhabited DoD buildings. They also include recommendations that should be, but are not required to be, incorporated into all such buildings.

A.3.1.2 Flight Safety

Flight Safety Procedures

The Air Force Safety Center (AFSEC) recently initiated several facets for proactive flight safety. While investigations after an accident have yielded causality of mishaps, proactive safety entails searching for and measuring precursors that can lead to accidents before they occur. In mission planning, pre-flight, and during flight, safety is at the forefront of all USAF operations. By AFI, each unit conducting or supporting flight operations must have a flight safety program to support its mission and foster a culture of mishap prevention (USAF 2013a).

Aircraft Mishaps

Aircraft mishaps are classified as A, B, C, or D (Table A..3.1-1). Class A mishaps are the most severe with total property damage of \$2 million or more or a fatality and/or permanent total disability. It is important to note that in 2010, the threshold for determining Class A and B mishaps was raised from \$1 million to \$2 million dollars for Class A and the ceiling was raised for Class B to two million dollars. Comparison of Class A mishap rates for various aircraft types, as calculated per 100,000 flying hours, provides the basis for evaluating risks among different aircraft and levels of operations. Each base-specific safety section analyzes existing and projected Class A mishap potentials based on flying hours and aircraft types.

Table A.3.1-1. Aircraft Class Mishaps			
Mishap Class	Total Property Damage	Fatality/Injury	
A	\$2,000,000 or more and/or aircraft destroyed	Fatality or permanent total disability	
В	\$500,000 or more but less than \$2,000,000	Permanent partial disability or three or more persons hospitalized as inpatients	
С	\$50,000 or more but less than \$500,000	Nonfatal injury resulting in loss of one or more days from work beyond day/shift when injury occurred	
D	\$20,000 or more but less than \$50,000	Recordable injury or illness not otherwise classified as A, B, or C	

Source: DoD 2011.

Bird/Wildlife Aircraft Strike Hazard

BASH and the dangers it presents form another safety concern for aircraft operations. BASH constitutes a safety concern because of the potential for damage to aircraft or injury to aircrews or local populations if an aircraft crash should occur in a populated area. Aircraft can encounter birds at nearly all altitudes up to 30,000 feet above mean sea level (MSL); however, most birds fly close to the ground. According to the AFSEC BASH statistics, more than 50 percent of bird/wildlife strikes occur below 400 feet, and 90 percent occur at less than 2,000 feet above ground level (AGL) (AFSEC 2012a). Of these strikes, approximately 49 percent occur in the

airfield environment (AFSEC 2012b). Waterfowl present the greatest BASH potential due to their congregational flight patterns and because, when migrating, they can be encountered at altitudes up to 20,000 feet AGL. Raptors also present a substantial hazard due to their size and soaring flight patterns. In general, the threat of bird/wildlife aircraft strikes increases during March and April and from August through November due to migratory activities. The USAF BASH program was established to minimize the risk for collisions of birds/wildlife and aircraft and the subsequent loss of life and property. In accordance with AFI 91-202 AFGM2, U.S. Air Force Mishap Prevention Program (USAF 2013b), each flying unit in the USAF (including the Air Force Reserve Command and ANG) must develop a BASH plan to reduce hazardous bird/wildlife activity relative to airport flight operations. The intent of each plan is to reduce BASH issues at airfields by creating an integrated hazard abatement program through awareness, avoidance, monitoring, and actively controlling bird and animal population movements. Some of the procedures outlined in the plan include monitoring the airfield for bird and other wildlife activity, issuing bird hazard warnings, initiating bird/wildlife avoidance procedures when potentially hazardous bird/wildlife activities are reported, and submitting BASH reports for all incidents.

Fuel Jettison

Aircraft have two major types of weight limits: the maximum take-off weight and the maximum structural landing weight, with the maximum structural landing weight almost always being the lower of the two. This allows an aircraft on a normal, routine flight to take off at the higher weight, consume fuel en route, and arrive at a lower weight. If a flight takes off at the maximum take-off weight and then faces an emergency situation whereupon it must return to the departure airfield, there will not be time to consume the fuel intended for transit to the original destination, and the aircraft may exceed the maximum landing weight to land at the departure airfield. At this point, if the aircraft is capable, sufficient fuel would be jettisoned to reduce the aircraft's weight below that maximum landing weight limit and then it would land. This rare phenomenon is known as fuel jettisoning. AFIs cover the fuel jettison procedures, and local operating policies define specific fuel jettison areas for each base. The KC-46A, like the KC-135 aircraft, has the ability to jettison fuel in cases of emergency and non-emergency situations. Data on historical KC-135 operations show that slightly less than two sorties per thousand resulted in a release of fuel (Headquarters Air Mobility Command [AMC] 2013). The KC-46A can land at its maximum take-off weight; therefore, KC-46A sorties would rarely require fuel jettison. However, depending on the type and severity of an emergency, there is always the possibility of the requirement to adjust gross weight quickly for aircraft maneuverability/control for safety based on the nature of an emergency. If there are flight control issues, etc. where the aircraft needs to be at a lower gross weight for aircraft safety, then fuel jettisoning could take place.

Current USAF policy is designed to minimize potential impacts of fuel jettison events. The continued use of such strategies, in addition to the following tactics, would minimize the deposition of fuel onto the ground from a KC-46A fuel jettison event:

- Fuel jettison would occur at a minimum altitude of 20,000 feet AGL, whenever possible.
- Release fuel in a straight line.
- Release fuel at a right angle to flight level wind direction.
- Release fuel as slowly as possible.
- Release fuel at as fast of an aircraft speed as possible.
- Release fuel at as high of an altitude as possible.

For this EIS, previous studies and fuel jettisoning models were reviewed to determine if fuel jettisoning impacts were a concern to the well-being of humans and the environment. The analysis concluded that maximum fuel deposition values expected from the KC-46A would not produce substantial or significant impacts to human or natural resources (Headquarters Air Mobility Command AMC 2013).

In addition to military procedures, the FAA sets requirements for when and how fuel jettisoning may occur. The FAA instruction stipulates that, whenever possible, fuel can only be jettisoned above a minimum altitude of 20,000 feet AGL to improve its evaporation, and that a jettisoning aircraft must be separated from other air traffic by at least 5 miles (FAA 2012). Air traffic controllers are also instructed to direct planes dumping fuel away from populated areas and over large bodies of water to the extent practicable. In 2001, the USEPA National Vehicle and Fuel Emissions Laboratory concluded, "Since fuel dumping is a rare event, and the fuel would likely be dispersed over a very large area, we believe its impact to the environment would not be serious" (USEPA 2001).

The primary environmental concern from fuel jettison from an aircraft is for it to negatively impact human health or natural resources. The results of a study by Harvey Clewell concluded that if JP-4 jet fuel was jettisoned above a critical altitude of 20,000 feet AGL, the ultimate ground fall and related environmental impact would be negligible (Clewell 1980). The dumped fuel evaporates completely or it is transformed before reaching the ground. Only at significant lower dumping altitude or during strong precipitation, it may be possible that finest fuel droplets reach the ground.

With the USAF transition to JP-8 jet fuel, further studies on the effects of fuel jettisoning were warranted as the lower volatility of JP-8 fuel increases the time required for complete evaporation at ambient temperatures. Several mathematical models were developed and/or used to assess the impact of jettisoning JP-8 jet fuel, including an Air Force Institute of Technology model, the Fuel Jettisoning Simulation Model, and the Fuel Dumping Impact Assessment Model.

Additionally, a modified version of the Air Force Institute of Technology model, which includes surface evaporation, was used to evaluate the time required to evaporate JP-8 jet fuel after it reaches the surface.

Compared with the impact of JP-4 jet fuel, the jettisoning of JP-8 does result in more fuel reaching the surface. The surface and atmospheric temperatures greatly influence the evaporation rate of the jet fuel. Surface temperatures around 0 degrees Celsius (°C) (32 degrees Fahrenheit [°F]) and below result in a greater fraction of fuel reaching the surface. However, assuming a controlled release above 20,000 feet AGL and a non-freezing surface temperature, the deposition value of JP-8 is below known natural resource and human health thresholds for jet fuel and the impact should be negligible (Todd 1995). Accordingly, AFI 11-2KC-135 Volume 3, *C/KC-135 Operations Procedures*, and AMC policy establish 20,000 feet AGL as the minimum fuel jettison altitude.

A.3.2 Methodology

Based on the current commercial Boeing 767 aircraft, development and basing of the KC-46A includes a robust safety clearance program conducted by test pilots in multiple phases at the Boeing aircraft test facility. Modeling, simulation, and ground tests reduce the uncertainties of flight testing, and the flight test program ensures flight safety and reducing risks associated with new technologies.

At publication of this EIS, there have not been enough flight hours to accurately depict the specific safety record for this new aircraft. Therefore, the analysis used the similar airframe of the Boeing 767 aircraft safety records. Mishap analysis was based on that commercial aircraft to draw operational history, as well as the current refueling aircraft, the KC-135.

The assessment of safety examines how implementation of any of the alternatives would affect safety at the particular airfield location. Public safety impacts are considered relative to whether the general public is endangered as a result of proposed USAF activities. For each training activity or group of similar activities, an estimate of risk to the general public was formulated based on USAF safety procedures. Existing AFI and regulations provide operational and safety procedures for all normal USAF aerial events. Several factors were considered in evaluating the effects of USAF proposed activities on public safety. These factors include proximity to the public, access control, scheduling, public notification of events, frequency of events, duration of events, safety procedures, operational control of training events, and safety history.

A.4 SOILS AND WATER RESOURCES

A.4.1 Definition of the Resource

The term "soils" refers to the unconsolidated earthen organic or mineral materials overlying bedrock or other parent material. Soil structure, elasticity, strength, shrink-swell potential, and erodibility all determine the suitability of the ground to support man-made structures and facilities. Relative to development, soils typically are described in terms of their type, slope, physical characteristics, and relative compatibility or limitations with regard to particular construction activities and types of land use.

The Farmland Protection Policy Act (FPPA) was passed by Congress as part of the Agriculture and Food Act of 1981 (Public Law 97-98) in response to findings that millions of acres of farmland were being converted to non-farm uses each year. The Agriculture and Food Act was passed in an effort to protect farmland and combat urban sprawl. Additionally, the FPPA is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with state, local, and private programs and policies to protect farmland. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

Water resources analyzed in this EIS include both surface and groundwater quantity and quality, and floodplains. Surface water includes all lakes, ponds, rivers, and streams and is important for a variety of reasons including irrigation, power generation, recreation, flood control, and human health. The nation's waters are protected under the Clean Water Act (CWA). The goal of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water." Pollutants regulated under the CWA include "priority" pollutants, including various toxic pollutants; "conventional" pollutants, such as biochemical oxygen demand, total suspended solids, fecal coliform, oil and grease, and pH; and "nonconventional" pollutants, including any pollutant not identified as either conventional or priority. Under the CWA Section 402, it is illegal to discharge any point and/or nonpoint pollution sources into any surface water without a National Pollutant Discharge Elimination System (NPDES) permit. Specific State NPDES programs are discussed in Chapter 3 under each installation.

Groundwater includes the subsurface hydrologic resources of the physical environment and is by and large a safe and reliable source of fresh water for the general population, especially those in areas of limited precipitation and is commonly used for potable water consumption, agricultural irrigation, and industrial applications. Groundwater also plays an important part in the overall

hydrologic cycle and its properties are described in terms of depth to aquifer or water table, water quality, and surrounding geologic composition.

Floodplains are defined by Executive Order (EO) 11988, *Floodplain Management*, as "the lowland and relatively flat areas adjoining inland and coastal waters including flood-prone areas of offshore islands, including at a minimum, the area subject to a one percent or greater chance of flooding in any given year" (that area inundated by a 100-year flood). Floodplains and riparian habitat are biologically unique and highly diverse ecosystems providing a rich diversity of aquatic and terrestrial species, as well as promoting stream bank stability and regulating water temperatures. EO 11988 requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development whenever there is a practicable alternative.

The ROI for soils includes the locations on each installation where construction activities would occur. The ROI for water resources includes each of the five installations, as well as nearby surface waters that receive runoff generated within the specific project areas.

A.4.2 Methodology

Minimization of soil erosion and the siting of facilities in relation to soil limitations are considered when evaluating impacts to soils. Generally, impacts associated with earth resources can be avoided or minimized to a level of insignificance if proper construction techniques, erosion control measures, and structural engineering designs are incorporated into project development. Should the proposed activities have the potential to convert farmland to non-farm use, a land evaluation and site assessment would be conducted and alternative sites considered should potential adverse impacts to farmland exceed the recommended allowable level.

Adverse impacts to soils and the associated potential indirect impacts to water resources can be minimized through the implementation of standard construction practices such as those typically required to be in compliance with the CWA (i.e., the use of well-maintained silt fences or straw wattles, minimizing surficial areas disturbed, stabilization of cut/fill slopes, minimization of earth-moving activities during wet weather, and covering of soil stockpiles, as appropriate). Analysis of impacts to soil resources resulting from proposed activities examines the suitability of locations for proposed operations and activities. Impacts to soil resources can result from earth disturbance that would expose soil to wind or water erosion.

With regard to water resources, the primary concerns associated with the Proposed Action include changes to surface water drainage, effects on water quality during construction activities, and groundwater recharge. Stormwater discharges from construction activities (such as clearing,

grading, excavating, and stockpiling) that disturb 1 or more acres, or smaller sites that are part of a larger common plan of development or sale, are regulated under the NPDES stormwater program. Prior to discharging stormwater, construction operators must obtain coverage under an NPDES permit, which is administered by either the State (if it has been authorized to operate the NPDES stormwater program) or USEPA, depending on where the construction site is located. The permit is based on a project's overall risk and requires measures to prevent erosion and reduce sediment and other pollutants in their discharges. Compliance with this permit involves development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes site-specific management measures.

A.5 BIOLOGICAL RESOURCES

A.5.1 Definition of the Resource

Biological resources include living, native, or naturalized plant and animal species and the habitats within which they occur. Plant associations are generally referred to as *vegetation* and animal species are referred to as *wildlife*. Habitat can be defined as the resources and conditions present in an area that produces occupancy of a plant or animal (Hall *et al.* 1997). Although the existence and preservation of biological resources are intrinsically valuable, these resources also provide aesthetic, recreational, and socioeconomic values to society. This analysis focuses on species or vegetation types that are important to the function of the ecosystem, of special societal importance, or are protected under federal or state law or statute. For purposes of this EIS, these resources are divided into four major categories: vegetation, wildlife, special status species, and wetlands.

Vegetation types include all existing terrestrial plant communities as well as their individual component species. The affected environment for vegetation includes only those areas potentially subject to ground disturbance.

For the purposes of this analysis, *wildlife* includes all fish, amphibian, reptile, bird, and mammal species with the exception of those identified as special status species (special status wildlife species are addressed separately due to their protected status). Wildlife also includes those bird species protected under the federal Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and other species-specific conservation legal authorities. Assessment of a project's effect on migratory birds places an emphasis on "species of concern" as defined by EO 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*. Additional assessment of potential impacts to migratory birds that are regionally rare occurs under the special status species category.

Special Status Species are defined as those plant and animal species listed as endangered, threatened, and species proposed for listing by the U.S. Fish and Wildlife Service (USFWS)

under the Endangered Species Act (ESA), and by state agencies. The federal ESA protects federally listed endangered and threatened plant and animal species. Critical habitat is a term defined and used in the ESA. It is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. Federally identified candidate species (species proposed for listing) are not protected under law; however, these species could become listed, and therefore, protected at any time. Their consideration early in the planning process may avoid future conflicts that could otherwise occur. Additionally, the corresponding state regulatory agencies (Kansas Department of Wildlife, Parks and Tourism; New Jersey Division of Fish and Wildlife; New Hampshire Fish and Game; Pennsylvania Department of Conservation and Natural Resources, and Ohio Department of Natural Resources) protect state-listed plant and animal species through State fish and wildlife and administrative codes.

Wetlands are considered sensitive habitats and are subject to federal regulatory authority under Section 404 of the CWA and EO 11990, Protection of Wetlands. Wetlands are defined by the U.S. Army Corps of Engineers (USACE) as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (Environmental Laboratory 1987). Wetlands generally include swamps, marshes, bogs, and similar areas.

The ROI for biological resources consists of lands within the vicinity of the airfield at the five alternative locations.

A.5.2 Methodology

Analysis of impacts to biological resources focuses on whether and how components of the Proposed Action could affect biological resources. Determination of the significance of potential impacts to biological resources is based on:

- the importance (i.e., legal, commercial, recreational, ecological, or scientific) of the resource.
- the proportion of the resource that would be affected relative to its occurrence in the region,
- the sensitivity of the resource to proposed activities, and
- the duration of ecological ramifications.

Impacts to biological resources would be considered significant if species or habitats of concern were significantly adversely affected over relatively large areas or disturbances resulted in reductions in the population size or distribution of a special status species, or if laws, codes, or ordinances protecting special status species were violated.

A.6 CULTURAL RESOURCES

A.6.1 Definition of the Resource

Cultural resources consist of prehistoric and historic districts, sites, structures, artifacts, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. Cultural resources can be divided into three major categories: archaeological resources (prehistoric and historic), architectural resources, and traditional cultural resources.

Archaeological resources are locations where human activity measurably altered the earth or left deposits of physical remains (e.g., tools, arrowheads, or bottles). "Prehistoric" refers to resources that predate the advent of written records in a region. These resources can range from a scatter composed of a few artifacts to village sites and rock art. "Historic" refers to resources that postdate the advent of written records in a region. Archaeological resources can include campsites, roads, fences, trails, dumps, battlegrounds, mines, and a variety of other features.

Architectural resources include standing buildings, dams, canals, bridges, and other structures of historic or aesthetic significance. Architectural resources generally must be more than 50 years old to be considered for protection under existing cultural resource laws. However, more recent structures, such as Cold War era military buildings, may warrant protection if they have exceptional characteristics and the potential to be historically significant structures. Architectural resources must also possess integrity (i.e., its important historic features must be present and recognizable).

Traditional cultural resources can include archaeological resources, buildings, neighborhoods, prominent topographic features, habitats, plants, animals, and minerals that Native Americans or other groups consider essential for the continuance of traditional cultures.

Only cultural resources considered to be significant, known or unknown, warrant consideration with regard to adverse impacts resulting from a proposed action. To be considered significant, archaeological or architectural resources must meet one or more criteria as defined in 36 CFR 60.4 for inclusion in the National Register of Historic Places (NRHP). The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or
- (c) that embody the distinctive characteristics of a type, period, or method of construction; or
- (d) that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (e) that have yielded, or may be likely to yield, information important in prehistory or history.

Several federal laws and regulations have been established to manage cultural resources, including the National Historic Preservation Act (NHPA) (1966), the Archaeological and Historic Preservation Act (1974), American Indian Religious Freedom Act (1978), the Archaeological Resources Protection Act (1979), and Native American Graves Protection and Repatriation Act (1990). In addition, coordination with federally recognized Native American tribes must occur in accordance with EO 13175, Consultation and Coordination with Indian Tribal Governments.

On November 27, 1999, the DoD promulgated its Annotated American Indian and Alaska Native Policy, which emphasizes the importance of respecting and consulting with tribal governments on a government-to-government basis in recognition of their sovereignty as a nation. This Policy requires an assessment, through consultation, of the effect of proposed DoD actions that may have the potential to significantly affect protected tribal resources, tribal rights, and Indian lands before decisions are made by the respective services (DoD American Indian/Alaska Native Policy), as does DoD Instruction 4710.02, *Interaction with Federally Recognized Tribes* (September 14, 2006).

The ROI for cultural resources includes only those locations on the specific installation where facility renovation or construction and its staging would occur and potential ground disturbance would result. The ROI does not include areas under the airspace used by the units, as there are no relevant changes to use of the airspace. There are no known tribal resources within any installation ROI that would be affected by noise.

A.6.2 Methodology

Cultural resources are subject to review under both federal and state laws and regulations. Section 106 of the NHPA of 1966 empowers the Advisory Council on Historic Preservation to comment on federally initiated, licensed, or permitted projects affecting cultural sites listed or eligible for inclusion on the NRHP. Once cultural resources have been identified, significance evaluation is the process by which resources are assessed relative to significance criteria for

scientific or historic research, for the general public, and for traditional cultural groups. Only cultural resources determined to be significant (i.e., eligible for the NRHP) are protected under the NHPA.

To complete the analysis of impacts to cultural resources, various sources of information were utilized. This included a review of previous cultural resource survey reports, Integrated Cultural Resource Management Plans, if available, and other documents available from the five installations that contained background information on the histories and the physical landscapes of the installations. Additionally, consultation with federally-recognized American Indian Tribes is in process to assist in determining impacts to traditional cultural resources. The list of Tribes being consulted was primarily compiled using two federal on-line resources: 1) the U.S. Department of Housing and Urban Development Tribal Directory Assessment Tool Version 2.0, which is designed to help users identify tribes by county and state and to provide appropriate tribal contact information to assist in consultation (U.S. Department of Housing and Urban Development 2013); and 2) the Native American Consultation Database, part of the National Native American Graves Protection and Repatriation Act Online Databases, which is a tool for identifying consultation contacts (National Park Service 2013). The JB MDL ANGS has already invited two federally-recognized tribes (Delaware Nation and Delaware Tribe of Indians) to participate in a government-to-government relationship. In the past, the Stockbridge-Munsee Community was invited by JB MDL to participate in government-to-government consultation, but declined interest in being further consulted. At Forbes ANGS, the Tribes to include in consultation were determined from a list provided in the Integrated Cultural Resource Management Plan (Air Force Center for Engineering and the Environment 2010) by the Kansas SHPO as having an interest in Shawnee County. The Federal Register was utilized to verify the federally-recognized status of each Tribe (77 Federal Register 47868 2012). Table A.6.2-1 lists the federally-recognized tribes for consultation at each installation.

Table A.6.2-1 Federally-recognized Tribes for Consultation

Alternative #	Installation, State	Tribe(s) ¹
Alternative #1	Forbes ANGS, Kansas	Citizen Potawatomi Nation
		2) Delaware Nation
		3) Kaw Nation
		4) Osage Nation of Oklahoma
		5) Prairie Band of Potawatomi Nation
		6) Absentee Shawnee Tribe of Oklahoma
		7) Eastern Shawnee Tribe of Oklahoma
		8) Wichita and Affiliated Tribes
Alternative #2	JB MDL, New Jersey	1) Delaware Nation
		2) Delaware Tribe of Indians
		3) Stockbridge-Munsee Community ²
Alternative #3	Pease ANGS, New	Penobscot Indian Nation
	Hampshire	1) Penooscot indian Nation
Alternative #4	Pittsburgh ANGS,	 Cayuga Nation of New York
	Pennsylvania	Onondaga Nation of New York
		3) Tuscarora Nation of New York
		4) Seneca Nation of Indians
		5) Tonawanda Band of Seneca
Alternative #5	Rickenbacker ANGS,	 Citizen Potawatomi Nation
	Ohio	2) Delaware Nation
		3) Prairie Band of Potawatomi Nation
		4) Eastern Shawnee Tribe of Oklahoma
		5) Forest County Potawatomi Community
		6) Hannahville Indian Community
		7) Miami Tribe of Oklahoma
		8) Ottawa Tribe of Oklahoma
		9) Peoria Tribe of Indians Oklahoma
		10) Pokagon Band of Potawatomi Indians
		11) Shawnee Tribe
		12) Turtle Mountain Band of Chippewa
		Indians of North Dakota
		13) Wyandotte Nation

Notes: 1. Several tribes overlap with one or more installations. When this occurred only one letter was sent out discussing each installation they may have an interest in.

Analysis of potential impacts to cultural resources considers both direct and indirect impacts.

Direct impacts may occur by:

- physically altering, damaging, or destroying all or part of a resource;
- altering characteristics of the surrounding environment that contribute to resource significance;
- introducing visual, audible, or atmospheric elements that are out of character with the property or alter its setting; or
- neglecting the resource to the extent that it deteriorates or is destroyed.

^{2.} This Tribe was identified prior to knowledge that they had declined further consultation with JB MDL.

Direct impacts can be assessed by identifying the type and location of the proposed action and by determining the exact locations of cultural resources that could be affected. Indirect impacts primarily result from the effects of project-induced population increases and the resultant need to develop new housing areas, utilities services, and other support functions necessary to accommodate population growth. These activities and subsequent use of facilities can disturb or destroy cultural resources.

A.7 LAND USE

A.7.1 Definition of the Resource

Land use comprises the natural conditions and/or human-modified activities occurring at a particular location. Human-modified land use categories generally include residential, commercial, industrial, agricultural, and other public uses. Management plans and zoning regulations determine the type and extent of land use allowable in specific areas and are often intended to protect specially designated or environmentally sensitive areas and sensitive noise receptors.

Several siting criteria have been established specifically for land development and use at commercial and military airfields. For example, APZs and RPZs, which address height restrictions, development density, and land use in and around airports, are enforced to reduce the potential for aircraft-related hazards.

The Federal Interagency Committee on Urban Noise (FICUN) and the Department of Defense have established guidelines to help assess land use compatibility with aircraft noise exposure. As shown in Table A.7.1-1, a range of noise exposure levels are associated with a given land use. The relative position of the compatibility interval is arbitrarily defined within 5 to 10 dB of an absolute level to indicate compatibility. These guidelines are intended as a planning tool and as such provide general indications as to whether particular land uses are appropriate for certain measured noise exposure levels. The designations in the table do not constitute a federal determination that any land use is acceptable or unacceptable under federal, state, or local law.

The ROI for land use is the area immediately surrounding the airfield at each alternative installation. The ROI does not include the land underneath the Special Use Airspace (SUA) proposed for use since no new airspace or changes to the existing airspace structure are proposed. The proposed increase in operations would not result in changes to the noise environment that would affect existing land uses.

Table A.7.1-1. Land-Use Compatibility With Yearly Day-Night Average Sound Levels

T 111		Yearly Day-N	ight Average So	ound Level (DN	L) in Decibels	
Land Use	Below 65	65–70	70–75	75–80	80–85	Over 85
Residential						
Residential, other than mobile homes and						
transient lodgings	Y	N(1)	N(1)	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
Public Use			, ,	. ,		
Schools	Y	N(1)	N(1)	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoria, and concert halls	Y	25	30	N	N	N
Government services	Y	Y	25	30	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
Commercial Use			. ,	()	, ,	
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail—building materials,						
hardware, and farm equipment	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade—general	Y	Y	25	30	N	N
Utilities	Y	Y	Y(2)	Y(3)	Y(4)	N
Communication	Y	Y	25	30	N	N
Manufacturing and Production						
Manufacturing, general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Y	Y	25	30	N ,	N
Agriculture (except livestock) and forestry						
	Y	Y(6)	Y(7)	Y(8)	Y(8)	Y(8)
Livestock farming and breeding	Y	Y(6)	Y(7)	N	N	N
Mining and fishing, resource production and			()			
extraction	Y	Y	Y	Y	Y	Y
Recreational						
Outdoor sports arenas and spectator sports						
1	Y	Y(5)	Y(5)	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts, and camps	Y	Y	Y	N	N	N
Golf courses, riding stables, and water						
recreation	Y	Y	25	30	N	N

Numbers in parentheses refer to notes

NOTES FOR TABLE A.7.1-1

- (1) Where the community determines that residential or school uses must be allowed, measures to achieve outdoor-to-indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide an NLR of 20 dB; thus the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year-round. However, the use of NLR criteria will not eliminate outdoor noise problems.
- (2) Measures to achieve NLR 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
- (3) Measures to achieve NLR 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
- (4) Measures to achieve NLR 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
- (5) Land-use compatible provided special sound reinforcement systems are installed.
- (6) Residential buildings require an NLR of 25.
- (7) Residential buildings require an NLR of 30.
- (8) Residential buildings not permitted.

Source: FICUN 1980.

^{*} The designations contained in this table do not constitute a federal determination that any use of land covered by the program is acceptable or unacceptable under federal, state, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise-compatible land uses.

KEY TO A..7.1-1

Y (YES) = Land Use and related structures compatible without restrictions.

N (No) = Land Use and related structures are not compatible and should be prohibited.

NLR = Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.

^{25, 30,} or 35 = Land Use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structures.

A.7.2 Methodology

Impacts to land use are evaluated by identifying whether an action is incompatible with an existing land use due to noise, safety, or other issues. The significance of potential land use impacts is based on the level of land use sensitivity in areas affected by a proposed action. In general, land use impacts would be significant if the action would: (1) be inconsistent or non-compliant with applicable land use plans or policies, including the county or city plans; (2) preclude the viability of an existing land use activity within the ROI; (3) preclude continued use or occupation of an area; or (4) be incompatible with adjacent nearby land use to the extent that public health or safety is threatened.

A.8 INFRASTRUCTURE AND TRANSPORTATION

A.8.1 Definition of the Resource

Infrastructure refers to the system of public works, such as utilities and transportation, which provide the underlying framework for a community. Utilities include such amenities as water, power supply, and waste management. Transportation refers to roadway and street systems, the movement of vehicles on roadway networks, pedestrian and bicycle traffic, and mass transit. The infrastructure components to be discussed in this section include the electrical system, natural gas system, wastewater, stormwater, solid waste management, potable water system, and the transportation network.

The ROI for infrastructure primarily consists of the five alternative installations, with additional information presented for the surrounding vicinity, where relevant.

A.8.2 Methodology

Potential impacts to infrastructure elements at the five alternative installations are assessed in terms of effects of the Proposed Action on existing service levels. Impacts to transportation and utilities are assessed with respect to the potential for disruption or improvement of current circulation patterns and utility systems, deterioration or improvement of existing levels of service, and changes in existing levels of transportation and utility safety. Impacts may arise from physical changes to circulation or utility corridors, construction activity, and introduction of construction-related traffic and utility use. Adverse impacts to roadway capacities would be significant if roads with no history of capacity exceedance had to operate at or above their full design capacity as a result of an action. Transportation effects may arise from changes in traffic circulation, delays due to construction activity, or changes in traffic volumes. Utility system effects may include disruption, degradation, or improvement of existing levels of service or potential change in demand for energy or water resources.

For the range of public services discussed, the installations are required to proactively plan for and assess all specific infrastructure and utility requirements and other essential services to ensure that the proposed increase in personnel and their dependents would be accommodated under the Proposed Action. The installations routinely evaluate community facilities and services to account for fluctuations associated with new units assigned to the installation and the deployment of existing units. In addition, the installations identify infrastructure or utility needs within the scope of each corresponding project. If particular projects require additional infrastructure or utilities, they are incorporated as a part of that project. This process ensures that any infrastructure or utility deficiencies are identified in the initial planning stages.

To assess impacts to local landfills associated with solid waste generation as a result of proposed construction projects, a multiplier was used provided by the USEPA to estimate solid waste generation. The estimated pounds of waste generated each year from renovations, as described in *Building-Related Construction and Demolition Materials Amounts* (USEPA 2009), is:

(Total square footage of construction renovation per year) x (11.79 pounds/square foot [SF])* = X pounds of debris.

*11.79 pounds per SF is a USEPA multiplier used to estimated rate of debris generated during nonresidential renovations for an average office renovation based on sampling studies documented in *Building-Related Construction and Demolition Materials Amounts* (USEPA 2009). To estimate construction waste from nonresidential new construction (versus renovation), the USEPA uses a multiplier of 4.34 pounds per SF.

For this analysis, potential infrastructure impacts associated with implementation of the Proposed Action are evaluated. Potential infrastructure impacts would be related to construction activity and facility operations after completion, in addition to any increase in personnel associated with the Proposed Action.

A.9 HAZARDOUS MATERIALS AND WASTES

A.9.1 Definition of the Resource

This EIS analyzes impacts related to hazardous materials, toxic substances, hazardous waste, and contaminated sites. The potential for hazardous materials to be introduced to the alternative installations during the course of site development and construction activities; for toxic and hazardous wastes to be generated as a result of construction and demolition activities; and for encounters with contaminated media during the course of site preparation and construction/demolition activities is analyzed.

Impacts related to the continuing use of hazardous materials and generation of hazardous wastes associated with aircraft operations and maintenance as a result of the proposed aircraft conversion are also analyzed. Operational changes (increases/decreases in flying time) would affect the amount of hazardous materials used and stored at the alternative installations, as well as the amount of hazardous waste generated. In addition, changes in maintenance activities and schedules could result in a change in the use of hazardous or toxic substances or generation of hazardous wastes compared to existing conditions.

The ROI for hazardous materials and waste includes areas that could be exposed to an accidental release of a hazardous substance from construction activities, other specific areas affected by past and current hazardous waste operations, and areas where hazardous materials would be utilized or stored. Therefore, the ROI for this action is defined as the five alternative installations.

A.9.1.1 Hazardous Materials and Waste

Hazardous materials are chemical substances that pose a substantial hazard to human health or the environment. Hazardous materials include hazardous substances, extremely hazardous substances, hazardous chemicals, and toxic chemicals. In general, these materials pose hazards because of their quantity, concentration, physical, chemical, or infectious characteristics. The Resource Conservation and Recovery Act (RCRA) (42 USC 6903[5]) defines a hazardous waste as a solid waste, or combination of solid waste, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may: (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. For the purpose of this analysis, hazardous wastes include solid wastes that are regulated as hazardous based on either direct listing by USEPA or because they exhibit certain characteristics (ignitability, reactivity, corrosivity, and toxicity), as well as those contaminants present in environmental media (e.g., soil or groundwater).

Hazardous substances are defined and regulated under the laws administered by OSHA, USEPA, and the U.S. Department of Transportation. Each of these agencies incorporates hazardous substance terminology in accordance with its unique Congressional mandate:

- OSHA regulations categorize substances in terms of their impacts to employee and workplace health and safety;
- U.S. Department of Transportation regulations categorize substances in terms of their safety in transportation; and

• USEPA regulations categorize substances in terms of protection of the environment and the public health.

With regard to environmental impacts, hazardous substances are regulated under several federal programs administered by the USEPA, including Comprehensive Environmental Response, Compensation, and Liability Act, Toxic Substances Control Act (TSCA), and RCRA. DoD installations are required to comply with these laws and Emergency Planning and Community Right-to-Know Act (per EO 15314), along with other applicable federal, state, and DoD regulations, as well as with relevant EOs.

When accumulating hazardous waste on-site, large quantity generators must comply with 40 CFR 262.34(a) and small quantity generators must comply with 40 CFR 262.34(d) to avoid the requirement to obtain a hazardous waste treatment, storage, or disposal permit. Generators of 1,000 kilograms/month of hazardous waste or >1 kilogram/month of acute hazardous waste are large quantity generators. A hazardous waste generation point is where the waste is initially created or generated. A satellite accumulation point (SAP) is an area where hazardous waste is initially accumulated at the point of generation and is under the control of the SAP manager. Wastes stored in these areas may be stored for 90 days for large quantity generators and 180 days for small quantity generators. Hazardous wastes initially accumulated at a SAP are accumulated in appropriate containers before being transferred to the installation central accumulation point (CAP).

A.9.1.2 Toxic Substances

The promulgation of TSCA (40 CFR §§ 700-766) represented an effort by the federal government to address those chemical substances and mixtures for which it was recognized that the manufacture, processing, distribution, use, or disposal may present unreasonable risk of personal injury or health of the environment, and to effectively regulate these substances and mixtures in interstate commerce. The TSCA Chemical Substances Inventory lists information on more than 62,000 chemicals and substances. Toxic chemical substances regulated by USEPA under TSCA include asbestos and lead, which for the purposes of this analysis, are evaluated in the most common forms found in buildings, namely asbestos-containing materials (ACMs) and lead-based paint (LBP). TSCA also establishes management obligations for the cleanup of polychlorinated biphenyls (PCBs).

ACMs have been classified as a HAP by the USEPA in accordance with Section 112 of the CAA. Surveys would be conducted for ACMs, as required by 40 CFR § 61.145, during the design phase of each construction project and prior to demolition or renovation of any structure. Any located ACM would be characterized, managed, transported, and disposed of according to

applicable state and federal requirements for protecting human health and safety and the environment.

LBP may also be present in buildings or other facilities that would be modified or demolished as part of the Proposed Action. Similar to ACMs, surveys would be conducted on structures to be modified or demolished for LBP during the design phase of each construction project and prior to structure demolition or renovation. LBP sampling would be conducted on the structures to be removed and analyzed in accordance with USEPA approved Toxicity Characteristic Leaching Procedure methodology. Based on this federal testing methodology, the paint would be considered hazardous if lead is detected at concentrations greater than 5 micrograms per liter. If LBP were detected at hazardous concentrations, these materials would be removed according to accepted methodologies. LBP would be characterized, managed, transported, and disposed of according to applicable state and federal requirements for protecting human health and safety and the environment.

Beginning in the 1920s, PCBs had many common household uses, including applications in electrical transformers, as coolants in refrigeration machinery, and in oil and hydraulic fluids. PCBs are toxic and have been classified as a persistent organic pollutant, acting as carcinogens that do not break down easily in the environment. Thus, the manufacture and use of PCBs in the U.S. was banned by Congress in 1979 and cleanup actions are regulated through TSCA.

A.9.1.3 Contaminated Sites

Potential hazardous waste contamination areas are being investigated as part of the Defense Environmental Restoration Program (DERP). DoD developed the DERP to identify, investigate, and remediate potentially hazardous material disposal sites on DoD property prior to 1984. There are two restoration programs under DERP, the Installation Restoration Program (now known as the Environmental Restoration Program [ERP]) and the Military Munitions Response Program. These programs were instituted to satisfy the requirements of Comprehensive Environmental Response, Compensation, and Liability Act and RCRA for former and current hazardous waste sites.

A.9.2 Methodology

The qualitative and quantitative assessment of impacts from hazardous materials and solid waste management focuses on how and to what degree the alternatives affect hazardous materials usage and management, hazardous waste generation and management, and waste disposal. A substantial increase in the quantity or toxicity of hazardous substances used or generated would be considered potentially significant. Significant impacts could result if a substantial increase in

human health risk or environmental exposure was generated at a level that cannot be mitigated to acceptable standards.

The potential increase in the throughput of petroleum substances and hazardous waste streams was estimated by evaluating the change from the baseline number of flying hours for each alternative installation and comparing that to the proposed 8,040 annual flying hours. The KC-135 has an estimated fuel flow rate to power the aircraft of approximately 2,500 pounds per hour per engine; or an average of 10,000 pounds of fuel per hour. The KC-46A aircraft has a similar estimated fuel flow rate of 4,500 pounds per hour per engine; or an average of 9,000 pounds of fuel per hour. Thus, based on the percent increase in flying hours at each alternative installation, it was assumed that there would be a commensurate increase in the throughput of petroleum substances and hazardous waste streams.

Regulatory standards and guidelines have been applied in evaluating the potential impacts that may be caused by hazardous materials and wastes. The following criteria were used to identify potentially significant impacts:

- Generation of 100 kilograms (or more) of hazardous waste or 1 kilogram (or more) of an acutely hazardous waste in a calendar month, resulting in increased regulatory requirements.
- A spill or release of a reportable quantity of a hazardous substance as defined by the USEPA in 40 CFR Part 302.
- Manufacturing, use, or storage of a compound that requires notifying the pertinent regulatory agency according to the Emergency Planning and Community Right-to-Know Act.
- Exposure of the environment or public to any hazardous material and/or waste through release or disposal practices.

A.10 SOCIOECONOMICS

A.10.1 Definition of the Resource

Socioeconomics comprises the basic attributes and resources associated with the human environment, particularly population and economic activity. Economic activity typically encompasses employment, personal income, and economic growth. Impacts to these fundamental socioeconomic components also influence other issues such as housing availability and the provision of public services. To illustrate local baseline conditions, socioeconomic data provided in this section consists primarily of county and city level data for the areas surrounding the alternative installations. Where 2010 Census data was not yet available for all demographic and economic data, American Community Survey (ACS) 2011 5-year estimates were used (data on employment and school enrollment).

The ROI for socioeconomics associated with the five alternative installations includes the counties, townships, and towns/cities that each installation lies within, as well as those that lie under or near the current and proposed noise contours. The ROI does not include the land below the airspace used since no ground disturbance would occur in these areas and the Proposed Action would generate minimal changes in noise, frequency of use, duration of use, and number of operations at these locations.

A.10.2 Methodology

Socioeconomic impacts are assessed in terms of direct effects to the local economy and population and related indirect effects on other socioeconomic resources within the ROI. Socioeconomic impacts would be considered significant if the Proposed Action resulted in a substantial shift in population trends or notably affected regional employment, earnings, or community resources such as schools.

A.11 Environmental Justice and the Protection of Children

A.11.1 Definition of the Resource

In 1994, EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, was issued to focus the attention of federal agencies on human health and environmental conditions in minority and low-income communities. EO 12898 aims to ensure that disproportionately high and adverse human health or environmental effects to these communities are identified and addressed. This environmental justice analysis focuses on the distribution of race and poverty status in areas potentially affected by implementation of the Proposed Action.

For the purpose of this analysis, minority populations and low-income populations are defined as:

- *Minority Populations:* All categories of non-white population groups as defined in the U.S. Census, including African American, Hispanic, American Indian and Alaska Native, Asian or Pacific Islander, and other groups.
- Low-Income Populations: Persons living below the poverty level, as defined by the 2010 Census.

Because children may suffer disproportionately from environmental health risks and safety risks, EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, was introduced in 1997 to prioritize the identification and assessment of environmental health and safety risks that may affect children, and to ensure that federal agency policies, programs, activities, and standards address environmental and safety risks to children. This section

identifies the distribution of children and locations where the number of children in the affected area may be disproportionately high (e.g., schools, childcare centers).

The ROI for environmental justice associated with the five alternative installations includes the counties, townships, and towns/cities that each installation lies within, as well as those that lie under or near the current and proposed noise contours. Total population, minority population, and number of children under the age of 18 were obtained from the 2010 census data. Low-income population numbers are from the 2007-2011 ACS 5-Year Estimates. The ROI does not include the land below the airspace used since no ground disturbance would occur in these areas and the Proposed Action would generate minimal changes in noise, frequency of use, duration of use, and number of operations at these locations.

A.11.2 Methodology

To comply with EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, and EO 13045, Protection of Children from Environmental Health Risks and Safety Risks, areas containing relatively high disadvantaged or youth populations are given special consideration regarding potential impacts in order to address the potential for disproportionately high or adverse human health or environmental effects to these communities. Ethnicity and poverty status in the vicinity of the Proposed Action have been examined and compared to city, county, state, and national data to determine if any minority or low-income communities could potentially be disproportionately affected by implementation of any of the alternatives. Geographic Information Systems census block data obtained from the U.S. Census Bureau was used to obtain information on minority and low-income populations located within the vicinity of the Alternative locations. A census block is the smallest geographic unit used by the U.S. Census Bureau for tabulation of 100 percent data (data collected from all houses, rather than a sample of houses).

Three criteria must be met for impacts to minority and low-income communities to be considered significant: (1) there must be one or more such populations within the ROI, (2) there must be adverse (or significant) impacts from the Proposed Action, and (3) the environmental justice populations within the ROI must bear a disproportionate burden of those adverse impacts. If any of these criteria are not met, then impacts with respect to environmental justice would not be significant.

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Correspondence

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Appendix B1

Interagency and Intergovernmental Coordination for Environmental Planning (IICEP)

The sample IICEP letter following was distributed to the list below:

Forbes ANGS

Director, Office of Federal Activities, U.S. Environmental Protection Agency, Region 7, 901 N 5th St, Kansas City, KS 66101

U.S. Fish and Wildlife Service, Kansas Ecological Services Field Office, 2609 Anderson Ave, Manhattan, KS 66502-2801

Federal Aviation Administration, Central Region, 901 Locust St, Kansas City, MO 64106-2641

Kansas Department of Health and Environment, Division of Environment, 1000 SW Jackson, Ste 400, Topeka, KS 66612-1367

Kansas Department of Wildlife and Parks, Region 2, 300 SW Wanamaker Rd, Topeka, KS 66606

Jennie Chinn, State Historic Preservation Officer, Kansas State Historical Society, Cultural Resources Division, 6425 SW 6th Ave, Topeka, KS 66615-1099

Director of Aviation, Kansas Department of Transportation, Dwight D. Eisenhower State Office Building, 700 SW Harrison, Topeka, KS 66603-3754

Shelly Buhler, Chair, Shawnee County Commissioner, District 1, 200 SE 7th St, Topeka, KS 66603

Shawnee County Planning Department, 1515 NW Saline St, Ste 102, Topeka, KS 66618

The Honorable Bill Bunten, Mayor of Topeka, 215 SE 7th, Room 352, Topeka, KS 66603-3914

Larry Wolgast, Councilperson, Topeka City Council District #5, 1512 SW 30th St, Topeka, KS 66611

City of Topeka Planning, 620 SE Madison, Topeka, KS 66607

Eric Johnson, Metropolitan Topeka Airport Authority, Forbes Field, Building 620, Topeka, KS 66619

Steve Ortiz, Council Chair, Prairie Band Potawatomi Tribe, 16281 Q Rd, Mayetta, KS 66509

Rick Campbell, Director, Environmental Department, Sac and Fox Nation of Missouri, 305 N Main St, Reserve, KS 66434

The Honorable Jerry Moran, U.S. Senate, 354 Russell Senate Office Bldg, Washington, DC 20510

The Honorable Pat Roberts, U.S. Senate, 109 Hart Senate Office Bldg, Washington, DC 20510

The Honorable Lynn Jenkins, House of Representatives, 1027 Longworth HOB, Washington, DC 20515

The Honorable Vicki Schmidt, Kansas Senate, 5906 SW 43rd Ct, Topeka, KS 66610-1632

The Honorable Lana Gordon, Kansas House of Representatives, 5820 SW 27th St, Topeka, KS 66614

The Honorable Sam Brownback, Office of the Governor, 300 SW 10th Ave, Ste 241S, Topeka, KS 66612-1590

Kelli Mosteller, THPO, Citizen Potawatomi Nation, 1601 S. Gordon Cooper Drive, Shawnee, OK 74801

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Kerry Holton, President, Delaware Nation, P.O. Box 825, Anadarko, OK 73005

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Mr. John D. Redeagle, Principal Chief, Osage Nation of Oklahoma, P.O. Box 779, 627 Grandview, Pawhuska, OK 70456

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JB MDL

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Paul Phifer, Ph.D., Assistant Regional Director, Ecological Services, U.S. Fish and Wildlife Service, Region 5, 300 Westgate Center Dr, Hadley, MA 01035-9589

Second Main Operating Base KC-46A Beddown at Alternative Air National Guard Installations EIS

Ruth W. Foster, New Jersey Department of Environmental Protection, Office of Permit Coordination and Environmental Review, 401 E State St. PO Box 420, Trenton, NJ 08625

Daniel Saunders, Administrator and Deputy State Historic Preservation Officer, New Jersey Department of Environmental Protection, Historic Preservation Office, PO Box 420, Trenton, NJ 08625-420

New Jersey Division of Fish and Wildlife, Endangered and Nongame Species Program, Department of Environmental Protection, PO Box 420, Trenton, NJ 08625-420

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The Honorable Thomas Harper, Mayor of Wrightstown, 21 Saylors Pond Rd, Wrightstown, NJ 08562

The Honorable Ronald Francioli, Mayor of New Hanover Township, 1000 Route 10, PO Box 250, Whippany, NJ 07981

The Honorable Jim Durr, Mayor of North Hanover Township, 41 Schoolhouse Rd, Jacobstown, NJ 08562

The Honorable David Patriarca, Mayor of Pemberton Township, 500 Pemberton-Browns Mills Rd, Pemberton, NJ 08068-1539

The Honorable Denis McDaniel, Mayor of Springfield Township, PO Box 119, Jobstown, NJ 08041

The Honorable Michael Reina, Mayor of Jackson Township, 95 W Veterans Hwy, Jackson, NJ 08527

The Honorable Mike Fressola, Mayor of Manchester Township, 1 Colonial Dr, Manchester, NJ 08759

The Honorable David Leutwyler, Mayor of Plumsted Township, 121 Evergreen Rd, New Egypt, NJ 08533

The Honorable Frank Lautenberg, U.S. Senate, 141 Hart Senate Office Bldg, Washington, DC 20510

The Honorable Robert Menendez, U.S. Senate, 528 Hart Senate Office Bldg, Washington, DC 20510

The Honorable Jon Runyun, House of Representatives, 1239 Longworth HOB, Washington, DC 20515

The Honorable Chris Smith, House of Representatives, 2373 Rayburn House Office Building, Washington, DC 20515

The Honorable Chris Christie, Office of the Governor, PO Box 001, Trenton, NJ 08625

The Honorable Samuel Thompson, New Jersey Senate, 2501 Highway 516, Ste 101, Old Bridge, NJ 08857

The Honorable Robert Clifton, New Jersey Assembly, 516 Route 33 West, Bldg 2, Ste 2, Millstone, NJ 08535

The Honorable Ronald Dancer, New Jersey Assembly, 405 Rt 539, Cream Ridge, NJ 08514

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Wavne Stull. Trust Board Chairman

Delaware Tribe of Indians, 170 NE Barbara St., Bartlesville, OK 74006

Kimberly Vele, President, Stockbridge-Munsee Community, N8476 Mo He Con Nuck Road, Bowler, WI 54416 Sherry White, THPO, Stockbridge-Munsee Community, N8476 Mo He Con Nuck Road, Bowler, WI 54416

Pease ANGS

U.S. Environmental Protection Agency, Region 1, Environmental Impact Branch 1, Congress St, Boston, MA 02114

Northeast Coordinator, U.S. Fish and Wildlife Service Region V, 300 Westgate Center Dr, Hadley, MA 01035

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New Hampshire Fish and Game Department, 11 Hazen Dr. Concord, NH 03301

New Hampshire State Port Authority, 555 Market St, Portsmouth, NH 03801

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New Hampshire Office of Energy and Planning, 57 Regional Dr, Ste 3, Concord, NH 03301

New Hampshire Department of Environmental Services, Wetlands Bureau, PO Box 95, Concord, NH 03302

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Bonnie Newsom, THPO, Penobscot Indian Nation, 12 Wabanaki Way, Indian Island, ME 04468

The Honorable Kelly Ayotte, U.S. Senate, 144 Russell Senate Office Bldg, Washington, DC 20510

The Honorable Jeanne Shaheen, U.S. Senate, 520 Hart Senate Office Bldg, Washington, DC 20510

The Honorable Carol Shea-Porter, House of Representatives, 1530 Longworth House Office Bldg, Washington, DC 20515

The Honorable Martha Clark, New Hampshire Senate, State House, Room 115, 107 N Main St, Concord, NH 03301

The Honorable Joe Scarlotto, New Hampshire Representative, 130 Oxford Ave, Portsmouth, NH 03801-4126

The Honorable Eric Spear, Mayor of Portsmouth, 1 Junkins Ave, Portsmouth, NH 03801

The Honorable Maggie Hassan, Office of the Governor, State House, 107 N Main St, Concord, NH 03301

Pittsburgh ANGS

Doug McLearen and Ms. Kira Heinrich, Archaeology & Protection Division, Pennsylvania Historical and Museum Commission - Bureau for Historic Preservation, Commonwealth Keystone Bldg, 400 North St, Harrisburg, PA 17120

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Kathy Frankel, Natural Resource Program Supervisor, Pennsylvania Department of Conservation and Natural Resources, 301 Fifth Ave, Ste 324, Pittsburgh, PA 15222-2420

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The Honorable Robert Casey, Jr., U.S. Senate, 393 Russell Senate Office Bldg, Washington, DC 20510

The Honorable Patrick Toomey, U.S. Senate, 502 Hart Senate Office Bldg, Washington, DC 20510

The Honorable Matt Smith, Pennsylvania Senate, Senate Box 203037, Harrisburg, PA 17120-3037

The Honorable Mark Mustio, Pennsylvania House of Representatives, 1009 Beaver Grade Rd, Ste 220, Moon Township, PA 15108

The Honorable Anthony Celeste, Mayor of Coraopolis, 1121 Third Ave, Coraopolis, PA 15108

The Honorable Tom Corbett, Office of the Governor, 301 5th Ave, Rm 240, Pittsburgh, PA 15222

The Honorable Tim Murphy, House of Representatives, 2332 Rayburn House Office Bldg, Washington, DC 20515 Melinda Maybee, Nation Representative, Cayuga Nation of New York, PO Box 803, Seneca Falls, NY 13148

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Rickenbacker ANGS

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Columbus Health Department, 240 Parsons Ave, Columbus, OH 43215

Ohio Department of Transportation, District 6, 400 E William St, Delaware, OH 43015

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Ohio Department of Natural Resources, Division of Geological Survey, 2045 Morse Rd, Bldg C1, Columbus, OH 43229-6693

Ohio Department of Natural Resources, Division of Wildlife, 2045 Morse Rd, Bldg G, Columbus, OH 43229-6693 Ohio Department of Natural Resources, Division of Soil & Water, 2045 Morse Rd, Bldg B-3, Columbus, OH 43229-6693

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Katie Delaney, Federal Aviation Administration, 11677 S Wayne Rd, Ste 107, Romulus, MI 48174

The Honorable Sherrod Brown, U.S. Senate, 713 Hart Senate Office Bldg, Washington, DC 20510

The Honorable Rob Portman, U.S. Senate, 448 Russell Senate Office Bldg, Washington, DC 20510

The Honorable Steve Stivers, House of Representatives, 1022 Longworth HOB, Washington, DC 20515

The Honorable Heather Bishoff, Ohio House of Representatives, 77 S High St, 10th Fl, Columbus, OH 43215

The Honorable Kevin Bacon, Ohio Senate, 1 Capitol Square, Ground Floor, Columbus, OH 43215

The Honorable John Kasich, Office of the Governor, 77 S High St, 30th Fl, Columbus, OH 43215-6117

The Honorable Michael Coleman, Mayor of Columbus, City Hall, 2nd Fl, 90 W Broad St, Columbus, OH 43215

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Steve Ortiz, Chairperson, Prairie Band of Potawatomi Nation, 16281 O Road, Mayetta, KS 66509

Harold Frank, Chairman, Forest County Potawatomi Community, PO Box 340, Crandon, WI 54520

Kenneth Meshigaud, Chairperson, Hannahville Indian Community, N14911 Hannahville B1 Rd., Wilson, MI 49896-9728

George Strack, THPO, Miami Tribe of Oklahoma, PO Box 1326, Miami, OK 74355

Thomas Gamble, Chairperson, Miami Tribe of Oklahoma, PO Box 1326, Miami, OK 74355-1326

Ethel E. áá Cooká, Chief, Ottawa Tribe of Oklahoma, P.O. Box 110, Miami, OK 74355

John P. Froman, Chief, Peoria Tribe of Indians of Oklahoma, P.O. Box 1527, Miami, OK 74355

Matthew J. Wesaw, Chairman, Pokagon Band of Potawatomi Indians, P.O. Box 180, Dowagiac, MI 49047

Mike Zimmerman, THPO, Pokagon Band of Potawatomi Indians, P.O. Box 180, Dowagiac, MI 49047

Jody Hayes, Tribe Administrator, Shawnee Tribe, P.O. Box 189, Miami, OK 74355

Ron Sparkman, Chairperson, Shawnee Tribe, P.O. Box 189, Miami, OK 74355

Kade Ferris, THPO, Turtle Mountain Band of Chippewa Indians of North Dakota, P.O. Box 900, Belcourt, ND 58316

Merle St. Claire, Chairman, Turtle Mountain Band of Chippewa Indians of North Dakota, P.O. Box 900, Belcourt, ND 58316

Billy Friend, Chief, Wyandotte Nation, 64700 East Highway 60, Wyandotte, OK 74370

Sherri Clemons, THPO, Wyandotte Nation, 64700 East Highway 60, Wyandotte, OK 74370

Sample IICEP Letter



NATIONAL GUARD BUREAU

3501 FETCHET AVENUE
JOINT BASE ANDREWS MD 20762-5157

NGB/A7AM 20 May 2013

Director, Office of Federal Activities U.S. Environmental Protection Agency, Region 7 901 N 5th St Kansas City, KS 66101

Dear Sir/Madam

The United States Air Force (USAF) plans to replace a portion of the existing KC-135 aerial refueling fleet with the KC-46A, which will be a new aircraft to the USAF's fleet. As such, the USAF plans to identify locations for the beddown of a formal training unit (FTU) and the first main operating base (MOB 1), which will both be led by active duty units. The USAF will also beddown the KC-46A at the second main operating base (MOB 2), which will be led by an Air National Guard (ANG) unit. The National Guard Bureau (NGB) is preparing an Environmental Impact Statement (EIS) to analyze the potential impacts of the MOB 2 KC-46A beddown. This letter references the MOB 2 beddown only, as the FTU and MOB 1 beddown are the subject of a separate action.

The NGB proposes to beddown KC-46A aircraft for MOB 2 at one of five alternative locations. The goal of KC-46A beddown is to continue to provide combat-qualified KC-46A personnel to support the regional and global air refueling mission, while replacing a portion of the KC-135 fleet. This action would involve the beddown of one KC-46A squadron consisting of 12 Primary Assigned Aircraft (PAA), and establishing a KC-46A MOB. The NGB has selected five alternative locations for this beddown:

- Forbes Air National Guard Station (ANGS), Kansas;
- Joint Base McGuire-Dix-Lakehurst (JB MDL), New Jersey;
- · Pease ANGS, New Hampshire;
- Pittsburgh ANGS, Pennsylvania; and,
- · Rickenbacker ANGS, Ohio.

Concurrent with the beddown of the KC-46A, the existing KC-135 aircraft at the selected installation would either be relocated to another installation and/or would be retired out of the USAF inventory, depending on the age and maintenance status of each aircraft. The beddown of the MOB 2 KC-46A would follow the Total Force Integration (TFI) concept that was enacted into law through the passage of the 2008 Defense Authorization Act, pairing two USAF component units (host and associate) together to operate as one. TFI supports USAF transformation by developing, promoting, and implementing new and creative organizational constructs and by advocating changes in personnel policy that enhance the integration of active, reserve, and civilian work forces. In support of TFI, an active duty associate unit would be

Sample IICEP Letter

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integrated with ANG personnel and equipment under any of the action alternatives, enabling joint training and execution of missions using ANG-assigned aircraft. The ANG host unit would be assigned principal responsibility of the physical resources for mission accomplishment (aircraft, equipment, facilities) and the active duty associate unit would share those resources.

As a result of the Proposed Action, there would be a change to the type of aircraft based at the selected installation; a change to the mix of aircraft using the associated airspace; changes to staffing and manpower at the selected location; changes to the number of airfield operations; as well as minor required construction, building renovation, and facility demolition. There would be no new or modified airspace required to support this action.

The NGB invites you to attend a public scoping meeting at one of the times and locations listed below. For your convenience, the NGB has set aside the 2-4 p.m. sessions for local, state, and federal agencies to attend, although you are also welcome at the 6-9 p.m. session if that meets with your schedule better. The addresses for the public scoping meetings are:

Scoping Meeting #1
Tuesday, June 4, 2013
2-4 p.m. and 6-9 p.m.

Township of Moon Municipal Building 1000 Beaver Grade Rd. Moon Township, PA

Scoping Meeting #3 Thursday, June 6, 2013 2-4 p.m. and 6-9 p.m.

Portsmouth Public Library Levensen Community Meeting Room 175 Parrot Ave. Portsmouth, NH Scoping Meeting #2 Tuesday, June 4, 2013 2-4 p.m. and 6-9 p.m.

Plumsted Fire District #1 Fire Station 59 Main St. New Egypt, NJ

> Scoping Meeting #4 Thursday, June 6, 2013 2-4 p.m. and 6-9 p.m.

Rickenbacker International Airport Terminal 7161 Second St. Columbus, OH

Scoping Meeting #5 Wednesday, June 20, 2013 2-4 p.m. and 6-9 p.m.

Museum of the Kansas National Guard 6700 S.W. Topeka Blvd. Topeka, KS

Sample IICEP Letter

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Please forward your written comments to the KC-46A EIS Project Manager, NGB/A7AM, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or ang.env.comments@ang.af.mil. You may also submit comments via the project website at www.angkc46aeis.com. Submit all comments within 30 days from the date of this letter. Thank you for your assistance.

Sincerely

ROBERT L. DOGAN, GS-13, REM Plans and Requirements Branch

The sample IICEP letter following was distributed to the list below:

U.S. Environmental Protection Agency, Region 7, 901 N 5th St, Kansas City, KS 66101

U.S. Fish and Wildlife Service, Kansas Ecological Services Field Office, 2609 Anderson Ave, Manhattan, KS 66502-2801

Federal Aviation Administration, Central Region, 901 Locust St, Kansas City, MO 64106-2641

Kansas Department of Health and Environment, Division of Environment, 1000 SW Jackson, Ste 400, Topeka, KS 66612-1367

Kansas Department of Wildlife and Parks, Region 2, 300 SW Wanamaker Rd, Topeka, KS 66606

Shawnee County Planning Department, 1515 NW Saline St, Ste 102, Topeka, KS 66618

Kansas Department of Transportation, Dwight D. Eisenhower State Office Building, 700 SW Harrison, Topeka, KS 66603-3754

Shelly Buhler, Shawnee County Commissioner, District 1, 200 SE 7th St, Topeka, KS 66603

City of Topeka Planning, 620 SE Madison, Topeka, KS 66607

The Honorable Bill Bunten, Mayor of Topeka, 215 SE 7th, Room 352, Topeka, KS 66603-3914

Larry Wolgast, Topeka City Council District #5, 1512 SW 30th St, Topeka, KS 66611

The Honorable Pat Roberts, U.S. Senate, 109 Hart Senate Office Bldg, Washington, DC 20510

Eric Johnson, Metropolitan Topeka Airport Authority, Forbes Field, Building 620, Topeka, KS 66619

The Honorable Jerry Moran, U.S. Senate, 354 Russell Senate Office Bldg, Washington, DC 20510

The Honorable Lana Gordon, Kansas House of Representatives, 5820 SW 27th St, Topeka, KS 66614

The Honorable Lynn Jenkins, House of Representatives, 1027 Longworth HOB, Washington, DC 20515

The Honorable Vicki Schmidt, Kansas Senate, 5906 SW 43rd Ct, Topeka, KS 66610-1632

The Honorable Sam Brownback, Office of the Governor, 300 SW 10th Ave, Ste 241S, Topeka, KS 66612-1590

Sample Forbes ANGS IICEP Letter



NATIONAL GUARD BUREAU

3501 FETCHET AVENUE
JOINT BASE ANDREWS MD 20762-5157

NGB/A7AM 16 Sep 13

Director, Office of Federal Activities U.S. Environmental Protection Agency, Region 7 901 N 5th St Kansas City, KS 66101

Dear Sir/Madam

The United States Air Force (USAF) plans to replace the existing KC-135 aerial refueling fleet with the KC-46A, which will be a new aircraft to the USAF's fleet. As such, the USAF has identified locations for the beddown of a formal training unit (FTU) and the first main operating base (MOB 1), which will both be led by active duty units. The USAF will also beddown the KC-46A at the second main operating base (MOB 2), which will be led by an Air National Guard (ANG) unit.

There are two separate Environmental Impact Statements (EISs) being prepared for the MOB 1/FTU¹ and MOB 2 aircraft beddowns. While you may be familiar with either or both of these actions, this particular letter is in reference only to the MOB 2 beddown action.

The MOB 2 alternative locations for this beddown include:

- Forbes Air National Guard Station (ANGS), Kansas;
- Joint Base McGuire-Dix-Lakehurst (JB MDL), New Jersey;
- Pease ANGS, New Hampshire;
- Pittsburgh ANGS, Pennsylvania; and,
- Rickenbacker ANGS, Ohio.

The EIS is being prepared under the National Environmental Policy Act (NEPA) for the potential beddown of the KC-46A at one of the five alternative locations, including Forbes ANGS in Kansas. The EIS will assess the potential environmental consequences associated with the beddown of the KC-46A at Forbes ANGS as a replacement to the KC-135. As a result of the Proposed Action, there would be a change to the type of aircraft based at the selected installation; a change to the mix of aircraft using the associated airspace; changes to staffing and manpower at the selected location; changes to the number of airfield operations; as well as minor required construction, building renovation, and facility demolition. There would be no new or modified airspace required to support this undertaking.

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¹ The FTU alternative installations include Altus Air Force Base (AFB), Oklahoma and McConnell AFB, Kansas. The MOB 1 alternative installations include Altus AFB, Oklahoma; McConnell AFB, Kansas; Fairchild AFB, Washington; and Grand Forks AFB, North Dakota.

Sample Forbes ANGS IICEP Letter

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At Forbes ANGS, the KC-46A would replace the KC-135 currently based at the installation. Under this alternative, the KC-46A would operate in existing airspace in a similar manner as is currently conducted. There may be a slight increase in operations in the airspace; however, use of this airspace is generally 10,000 feet above ground level and higher, and preliminary analysis indicates that noise levels under the proposal would be similar to existing noise levels with the KC-135 aircraft. Therefore, the National Guard Bureau (NGB) anticipates the area of potential effect for this action to be limited to the portion of the installation where construction, demolition, and renovation activities would occur.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [USC] 4321 *et seq.*), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and Air Force policy and procedures (32 CFR Part 989), the NGB is preparing an EIS in support of this action.

Included as an attachment with this letter is a CD that contains the first two chapters of the EIS: the purpose and need for the action, and the Description of the Proposed Action and Alternatives (DOPAA). We invite you to review these two chapters and provide comments. Your comments are important to us, in that they will help us to identify potential issues associated with implementation of the proposal. We will also send you the Draft EIS upon its release, which is anticipated in early 2014. We will continue to send you updates and information related to this action unless you request otherwise.

The NGB previously sent you a letter indicating that a scoping meeting at Forbes ANGS was to be held Thursday, June 20, 2013 at both 2-4 p.m. and 6-9 p.m. in Topcka, Kansas, and invited you to attend this informational meeting. This letter also documented that the formal scoping period was May 17 through July 5, 2013. Notices for the scoping meeting were posted and published in the *Topcka Capital-Journal* on June 9 and June 16, 2013. If you would like the NGB to consider your comments for inclusion in the Draft EIS, please forward your comments to the KC-46A MOB2 Project Manager, Ms. Anne Rowe, at NGB/A7AM, Shepperd Hall, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or email to ang.env.comments@ang.af.mil within 30 days of this notification.

If you have any questions regarding this consultation, please contact Ms. Anne Rowe. She can be reached at (240) 612-8636 or anne.rowe.ctr@ang.af.mil.

Sincerely

ROBERT L. DOGAN, GS-13, REM Plans and Requirements Branch

Bureau of Environmental Health 1000 SW Jackson St, Ste 330 Topeka, KS 66612-1365



Phone: 785-296-1560 Fax: 785-296-0984 BEH@kdheks.gov

Robert Moser, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

October 16, 2013

Robert L. Dogan, GS-13, REM National Guard Bureau Plans and Requirements Branch 3501 Fetchet Avenue Joint Base Andrews, MD 20762-5157

Dear Mr. Dogan:

This letter is in response to your letter received September 19, 2013 requesting comments regarding the proposed renovation and demolition activities for Forbes Air National Guard Station, in Kansas. This letter concerns asbestos-containing materials which may be present in older buildings.

Many of these older structures contain building materials which may contain asbestos. Common building materials which may be asbestos-containing materials (ACM) that are found in older public and commercial buildings include sprayed-on acoustical ceiling plasters, floor coverings such as vinyl tile and linoleum, siding, roof shingles and associated felts, as well as thermal system insulation on plumbing, boilers and steam piping, and duct work of heating and air-conditioning equipment.

As asbestos was used in more than 3600 different building materials, it is important to identify these materials prior to the start of the renovation or demolition activities. To determine if asbestos-containing materials are present in the building, an inspection for asbestos-containing materials by a trained and accredited asbestos inspector is required by federal EPA asbestos control regulations. Enclosed with this letter is a listing of firms which provide asbestos-related consultation services, including accredited inspections, for your consideration.

Asbestos-containing materials (ACM) are divided into two main categories. Non friable (hard) asbestos-containing materials are not easily damaged and do not readily release airborne asbestos fibers. Non friable ACM may include square floor tile, asphaltic roofing, and asbestos/cement (A/C) siding and shingles. These materials can become friable, and release airborne asbestos fibers, if subjected to sanding, grinding, sawing, crushing, or pulverizing to a powder.

Friable (soft) asbestos-containing materials are easily damaged and, when disturbed, can readily release airborne asbestos fibers. Friable ACM may include sprayed-on acoustical ceiling plasters, thermal insulation on heating and cooling systems, and resilient (no-wax) linoleum. If friable ACM is to be removed or disturbed by the renovation and demolition activities, they must be removed first by specially trained workers.

In Kansas, the removal of friable (soft) ACM must be performed by a Kansas licensed asbestos abatement contractor. These licensed contractors use certified asbestos workers, specialized equipment, and specific work procedures to remove friable ACM. I have enclosed a current listing of Kansas licensed asbestos abatement contractors, if friable ACM is to be removed during the construction activities of this renovation or demolition project.

Written notification of the intent to demolish public or commercial building or structures is required under the EPA asbestos NESHAP regulations (40 CFR Part 61.145). A Demolition Notification Form must be completed for each building or affected structure, and the completed form sent to KDHE, delivered or postmarked at least 10 working days prior to the start of demolition activities. Enclosed is the Asbestos Demolition Notification Form (ET-ASB10) for reporting intent to perform demolition for your use.

If you have any additional questions regarding asbestos related issues, please contact me at (785) 296-1689.

Sincerely,

Scott C. Bangert

Environmental Scientist

Radiation and Asbestos Control Section Bureau of Environmental Health

SCB:dr

Enclosures

ARCHITECTURAL/ENGINEERING/CONSULTING FIRMS OFFERING CONSULTING SERVICES FOR ASBESTOS

ABATEMENT**

ADDTI 2013

NAME	ADDRESS	APRI	APRIL, 2013 y st	113	PHONE #	INSPECTIONS A SAMPITNE	PROJECT DESTON	PROJECT
			1		7000000	מ מעשורוביות	מבסים	O TAION
*ACM Removal, LLC	5900 East Central, Suite 102	Wichita	KS	67208	316-218-3936	YES	YES	YES
ACT	14953 W. 101" Terrace	Lenexa	KS	66215	913-492-1337	yES*	yES	yEs
Alfred Benesch & Company	3226 Kimball Avenue	Manhattan	ফ	66503-2157	785-539-2202	yEs	yes	YES
Allied Environmental Consultants, Inc.	PO Box 234	Wichita	KS	67201-0234	316-262-5698	yes	yes	YES
American Metropolitan Environmental, Inc.	2713 W. Esthner Avenue	Wichita	8 S	67213	316-942-6323	yes	ves	yes
Apex Environmental Consultants, Inc.	14955 W. 101st Terrace	Lenexa	S _	66215	913-338-2739	yes	YES	yES
Burns & McDonnell	9400 Ward Parkway	Kansas City	οw	64114	816-333-9400	» YES	SBK	YES
Dalrymple Consulting, Inc.	7841 SW 12th Street	Topeka	KS	66615-1406	785-273-0345	XES .	SBK	YES
Environmental Technical Services	7881 W 156th Street	Overland Park	S	66223-2947	913-244-5706	SEK	yEs	yES
iSi Environmental Services	215 S. Laura	Wichita	ß	67211	316-264-7050	YES	SBK	YES
IMI Environmental	3000 Youngfield St, Ste 105	Wheat Ridge	8	80235	303-980-8749	SBA	SEK	YES
Kingston Environmental Services ISO 14001 Certified, NVLAP & ATLA Certified I observed	15450 Hangar Road	Kansas City	WO	64147	816-524-8811	VES*	yes	yes
Milco Environmental Services, Inc.	320 West 4th Street	Colby	SS .	67701	785-460-1956	yes	ON .	ON .
Milco Environmental Services, Inc.	109 East 2 rd Street	McCook	뿔	10069	308-345-4741	YES	ON N	2
Neil H. Miller & Associates	5900 East Central, Suite 102	Wichita	ठ	67208	316-706-5152	YES	YES	YES
Paradigm Group, LLC	PO Box 8200	Wichita	S.	67208	316-239-7097	YES	yes	YES
Precision Testing Laboratories	3703 W. Douglas	Wichita	ĸ	67213	316-265-0012	YES	yes	. YES
Roth Environmental Consultants, Inc	6600 College Blvd, Suite 220	Overland Park	ĸs	66211	913-663-9920	YES	YES	yES
Terracon	13910 W. 96th Terrace	Lenexa	જ	66215	913-492-7777	yES	yes	YES
Triad Environmental Services	2000 E. Atkinson PO Box 1507	Pittsburg	KS	66762	620-231-5660	YES	QN .	ON
Vac-U-Strip, Inc.	820-B Coronado Drive	Hutchinson	¥2	67502	620-669-8791	ON	yES	yEs

*FIRMS WITH LABORATORIES WHICH ANALYZE BULK SAMPLES FOR THE PRESENCE OF ASBESTOS

** THIS LIST WAS COMPILED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT TO ASSIST IN THE LOCATION OF FIRMS WHICH PROVIDE ASBESTOS CONSULTATION AND RELATED SERVICES THIS LIST DOES NOT REPRESENT AN APPROVAL OR RECOMMENDATION BY THE DEPARTMENT OF THE FIRMS LISTED OR SERVICES PROVIDED. NOR DOES THIS LISTING REPRESENT A COMPLETE OR EXCLUSIVE COMPILATION OF AVAILABLE SERVICES.

	KANSAS ASBESTOS LICENSED CONTRACTORS	NTRACTORS	10	o.	9/18/2013
L'alloque de la company de la		7 See 1651 28	130		
	# 015 815 B	MANA GETTA	STATE	4	PLONE #
*ACM Removal, LLC	5900 East Central, Suite 102	Wichita	KS	67208	316-684-1800
24/7 Enviro Solutions, Inc.	9312 E. US 24 Highway	Independence	WO	64053	816-252-0659
Abatement Systems, Inc.	PO Box 773	Broken Arrow	ğ	74013-0773	918-251-2504
Academy Roofing and Sheet Metal	6361 NE 14th Street	Des Moines	IA	50313	515-964-2345
Advanced Environmental Testing & Abatement, Inc.	803 Ricker Street	Waterloo	IA	50703	319-287-4447
Alamo 1	10843 Gulfdale	San Antonio	Ϋ́	78216	210-404-1220
ALM Environmental Services & Construction, LLC	1701 North 2nd Street, Suite #9	Clinton	WO	64735	660-890-8298
Allstate Environmental LLC	6304 E 109th Terrace	Kansas City	WO	64134	816-214-6597
American Pollution Control, Corporation	401 W Admiral Doyle Drive	New Iberia	۲۷	20560	337-365-7847
AMX Veterans Specialty Services, LLC	2351 W. Northwest HwySte 2118	Dalkas	ΤX	75220-8406	214-353-8087
Asbestos Handlers, Inc.	6920 East Reading Place	Tulsa	οK	74115-4637	918-836-5585
Associated Insulation, Inc.	701 Pecan Circle	Manhattan	KS	86502	785-776-0145
AT Abatement Services, Inc.	4915 Stilwell	Kansas City	WO	64120	816-242-0444
B & R Insulation, Inc.	15001 W. 101st Terrace	Lenexa	KS	66215	913-492-1346
Belfor Environmental, Inc.	5075 Kalamath Street	Denver	00	80221	303-425-7526
Bockmann, Inc.	1420 Centerpark Road	Lincoln		68512	402-423-6631
Brand Energy Solutions, LLC	1325 Cobb International Drive, Suite A-1	Kennesaw	6A	30152	678-285-1408
Brandenburg Industrial Service Company	2625 S Loomis Street	Chicago	IL	80909	312-326-5800
Brock Services, LLC	ark Drive, Ste 200	Houston	Ϋ́	77064	281-807-8200
Building Demolition Services	1638 West Street	Wichita	KS	67203	316-214-0905
Clearway Environmental Svs	7920 Ward Parkway	Kansas City	WO	64114	816-802-8480
Colorado Hazard Control, LLC	1775 W 55th Avenue	Denver	CO	80221	303-410-4941
Construction and Abatement Services, Inc.	610 NW Dunlap	Lees Summit	MO	64063	816-524-3233
Cornerstone Services Group LLC	PO Box 1268	Lancaster	PA	17603	717-399-5122
Enviro Remediation	PO Box 75323	Wichita	KS	67275	316-772-7235
Envirological Engineering, Inc.	2070 Peachtree Industrial Ct, Ste 104	Atlanta	GA	30341	770-455-0391
Environmental Action, Inc.	PO Box 1029	Jenks	OK	74037	918-298-4083
Environmental Assurance Co., Inc.	440 Hancock Street	Indianapolis	몺	46222	317-636-8500
Environmental Restoration, LLC	< Drive	Fenton	WO	63026	636-227-7477
Envirotech, Inc.	2737 Papin	St Louis	WO	63103	314-865-1293 ext
ESA, Inc.	116 Gateway Drive/PO Box 1370	North Sioux City	SD	57049-1370	605-232-4554
F & H Abatement Services, Inc.	PO Box 250/5003 E 61st North	Kechi		67067	316-264-2208
Forefront Environmental Services	35508 E. Howell Rd	Oak Grove	WO	64075	816-918-3757

	SAOTJA MEDDRES CHANALL SCHOOLS SERVING NAMED AND) 2 (CITIZA 39.2	STATE	NAZEP	# SNOHA
Gator Industries, LLC	300 N. Blackcat Rd	Joplin	ΟW	64801	417-624-4444
GenTech Construction Company, LLC	10350 Richmond Avenue, Ste 910	Houston	¥	77042	713-681-8486
Gerken Environmental Enterprises, Inc.	1528 W. Mt. Vernon	Springfield	OW	65802	417-863-7254
Great Plains Asbestos Control, Inc.	PO Box 39/820 E Railroad Street	Kearney	뜅	68848-0039	308-234-3350
Gulf Coast Dismantling, Inc.	PO Box 5249	Pasadena	ጅ	77508	281-487-0595
Horsley Specialties, Inc.	160 East Main St N./PO Box 1277	Rapid City	95	57709	605-342-5634
Hudspeth & Associates, Inc.	4775 S. Santa Fe Circle	Englewood	S	80110	303-791-5563
INSCO Environmental, Inc.	6902 Martindale Rd	Shawnee	KS	66218	913-422-8001
Integrated Solutions, Inc. (dba iSi)	215 S. Laura	Wichita	ks	67211	316-264-7050
Jacobson Asbestos Company	5527 SW 93rd Street	Wakarusa	KS	66546	785-272-6884
Kingston Environmental Services, Inc.		Kansas City	OW	64147	816-524-8811
Lakeshore Environmental Contractors, LLC	5513 Eastcliff Industrial Loop	Birmingham	AL.	35210	205-943-5711
LVI Environmental Services, Inc.	12 Oak Drive	Shawnee	ð	74801	405-273-4800
Major Abatement & Demolition, Inc.	PO Box 487	Blue Springs	WO	64013	816-874-4006
Mark One Electric Co., Inc.	909 Troost	Kansas City	WO	64106	816-842-7023
Mansfield Industrial, Inc.	PO Box 6205	Pensacola	끕	32503	850-477-6437
Mid-America Environmental Solutions		Carthage	MO	64836	417-358-3599
Midwest Service Group dba Midwest Asbestos Abatement Corporation 560 Turner Blvd		St Peters	WO	92869	636-926-7800
Midwest Steel Company, Inc.	9825 Moers Road	Houston	ጅ	77075	713-991-7843
NCM Demolition and Remediation, LP	404 N. Berry Street	Brea	CA	92821-3104	714-672-3500
New Horizons Enterprises, LLC	PO Box 681183	Kansas City	OW	64168	816-569-5256
P&M Insulation	2607 Indiana Road	Ottawa	KS	29099	785-242-0904
Pacific Technologies, Inc.		Boise		83711	208-344-8668
Patriot Abatement Services, LLC	PO 80x 2226	Olathe		66501-2226	913-397-6181
Performance Abatement Services, Inc.	16400 College	Lenexa	KS	66219	913-888-8600
Petrochem Insulation, Inc.	110 Corporate Place	Vallejo	CA	04260	707-644-7455
Piping Technology Company	PO Box 404	McPherson	KS	67460	620-241-3592
Prism Response, Inc.	102 Technology Lane	Export	PA	15632-8903	724-325-3330
Remediation Contractors, Inc.	1114 S. Santa Fe	Wichita	ĸs	67211-2438	316-269-1549
Sellers & Marquis Roofing Company		Kansas City	WO	64129	816-241-2221
SH Environmental Services, Inc.	2250 N Rock Road #118-281	Wichita	KS	67226	281-989-2690
Sunbelt Environmental Services, Inc.		Springfield	WO	20899	417-831-5052
W.R. King Contracting. Inc.	7915 W. 51st Street	Overland Park		66202	013.384.4043

Postmark Date _____ For Office Use Only

Form ET-ASB10 (09/12) Page 1



KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT ASBESTOS DEMOLITION NOTIFICATION FORM

GENERAL INSTRUCTIONS: This Asbestos Demolition Notification Form is to be completed and submitted before a building or structure is to be demolished. NOTE: IF THE BUILDING OR STRUCTURE CONTAINS FRIABLE ASBESTOS-CONTAINING MATERIALS, THE ASBESTOS NOTIFICATION FORM (ET-ASB8) MUST BE COMPLETED AND SUBMITTED TO THE DEPARTMENT. THIS ASBESTOS DEMOLITION FORM WILL NOT BE ACCEPTED FOR REPORTING THE REMOVAL OF FRIABLE ASBESTOS-CONTAINING MATERIALS FROM BUILDINGS SCHEDULED FOR DEMOLITION. This form is to be received by the Department not less than 10 working days before the demolition project is scheduled to start. Any notification that is incomplete or any notification indicating site activities to be in violation of applicable regulations will be considered an invalid notification.

Separate notifications must be provided for each building or other individual facility where demolition of said building or facility is to be demolished. Additional copies of this form should be reproduced as needed.

Under most circumstances, the removal of Category I nonfriable asbestos-containing materials will not be required prior to demolition unless the building is to be burned or the materials are considered to be friable. Category II nonfriable asbestos-containing materials must be removed prior to demolition if the materials would be subject to crushing, crumbling or pulverizing during the process of demolition of the building or structure.

Mail the original, signed and completed form to:

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT BUREAU OF ENVIRONMENTAL HEALTH ASBESTOS CONTROL SECTION 1000 SW JACKSON, SUITE 330 TOPEKA, KANSAS 66612-1365 (785) 296-1560

PART A AUTHENTICATION

	•	•	,	ovided is complete, true and corr
Name of Firm				
)			
PART B PROJECT	DESCRIPTION			
Building/Structure O	wner			
Owner Address:	Street			
	City		State	Zip
Owner Contact:	Name		Te	lephone No()
Building Address:	Street		City	County
Present Use:		Past Use:		Age of Building:
Building Floor Space:	(sq ft)			No. of Floors:
Scheduled Demolition	Start_		Completic	on
Describe how building	will be demolished: _			

Was on inspection for asbestos conduc	ted for this project?	Vet Na	
•		No	
If yes, provide the following information Inspector Name		Data Transacted	
Address			
Telephone No()			
Accreditation by		Exp. Date	
Provide method used to detect the pre			
PART D DEMOLITION CONTRA	CTOR INFORMATION		
Contractor:			
Address:			
City:	State	2	Zip
Contact:			
PART E IDENTIFIED ASBESTO			
Nonfriable Category I:		_	c. yd.
Nonfriable Category II:			
	s.f		
If friable asbestos-containing materia	is are present state who will be rei	moving the material and when the	will be removed.
If nonfriable Category II asbestos-coinsure these materials do not become to be burned? Is building or structure to be burned? from KDHE. NOTE: All asbestos-corremoved prior to burning.	riable (crushed, crumbled, or pulve	erized): If yes, attach a copy of the hall materials, as required by the	required approval letter ne Department, must be
Was demolition ordered by a Local Gov Yes No If ye	ernment because the structure is as, attach copy of the order	structurally unsafe and in dang	er if imminent collapse?
PART F WASTE DISPOSAL			
Disposal Site:			
KDHE Licensed Municipal Solid Waste	(Sanitary) or Construction/Demoli	tion (C&D) Landfill Permit Numl	ber
Location: City	County	y5	tate

	ironment fice Building son St., Suite 400 612-1367	Kansas	Phone: 785.296.1535 Fax: 785.296.8464 www.kdheks.gov
Robert Moser, M	D, Secretary	Department of Health & Environment	Sam Brownback, Governor
Comments by	y: KDHE	Tra	nsmittal Date: October 16, 2013
project as requi	red by Executive Order 12372.	unity for your agency to review and co Review Agency, please complete Part mpt response will be appreciated.	mments on this proposed s II and III as appropriate and
Return To:	Ms. Anne Rowe KC-46A MOB2 Project Man NBG/A7AM Shepperd Hall 3501 Fetchet Ave. Joint Base Andrews, MD 200		
PART I	R	REVIEW AGENCIES/COMMISSIO	N.
Aging	•	Education	State Forester
Agriculture		Geological Survey, KS	Transportation
Biological S		X Health & Environment	Water Office, KS
Conservation	on Commission	_Historical Society	Wildlife & Parks
Corporation	Commission	_Social & Rehabilitation	Commerce
COMMENTS: Please see the e	(Attach additional sheet if neces enclosed comments submitted by	y Jacqueline Grunau, Bureau of Enviro	ion at Forbes Air National Guard Station onmental Remediation and Don Carlson,
COMMENTS: Please see the e Bureau of Wate BER/Federal Fa	(Attach additional sheet if nece enclosed comments submitted by er. Scott Bangert, Asbestos Sect	ssary) Re: KC-46A and MOB 2 locat y Jacqueline Grunau, Bureau of Enviro ion will be sending a letter regarding a ay 28, 2013, which outlined the sites in	onmental Remediation and Don Carlson, sbestos information. Travis Daneke noted that
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Bureau of Environmental Remediation Curtis State Office Building 1000 SW Jackson St., Suite 410 Topeka, KS 66612-1367



phone: 785-296-1682 fax: 785-296-4823 jgrunau@kdheks.gov www.kdheks.gov

Robert Moser, MD, Secretary

Department of Health and Environment

Sam Brownback, Governor

MEMORANDUM

TO:

Donna Fisher

FROM:

Jacqueline Grunau

DATE:

September 30, 2013

RE:

Intergovernmental Agency Review requested by the National Guard Bureau in regards to the

potential Beddown Location at Forbes Air National Guard Station in Topeka, Kansas

The Kansas Department of Health and Environment (KDHE), Bureau of Environmental Remediation (BER), Assessment and Restoration Section, Superfund and Drycleaner Remediation Unit has identified one (1) known contaminated drycleaner facility within about three (3) miles of the proposed project.

Site Name	Address	Site ID
Yong's Cleaners	3601 SW Topeka Blvd.	C4-089-70730

Staff member(s) from the National Guard Bureau are welcome to come and view the KDHE-BER files in accordance with the Kansas Open Records Act. If you have any questions, please contact me by telephone at (785) 296-1682 or by e-mail at jgrunau@kdheks.gov.

Division of Environment Curis State Office Building 1000 SW Jackson St., Suite 400 Topeka, KS 66612-1367



Phone: 785.296.1535 Fax: 785.296.8464 www.kdheks.gov

Robert Moser, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

October 16, 2013

Ms. Anne Rowe KC-46A MOB2 Project Manager NBG/A7AM Shepperd Hill 3501 Fetchet Ave. Joint Base Andrrew, MD 20762-5157

Re: Proposed Action KC-46 Bedown at Air National

Dear Ms. Rowe:

Please see the following comments submitted by Don Carlson, Bureau of Water.

I have no objection to the proposal but offer the following comment for review and consideration:

Any construction activity which disturbs one acre or more is required to file a National Pollutant Discharge Elimination System (NPDES) permit application for stormwater runoff resulting from construction activities. The project owner (party responsible for the project) must obtain authorization from KDHE to discharge stormwater runoff associated with construction activities prior to commencing construction. The Kansas construction stormwater general permit, a Notice of Intent (application form), a frequently asked questions file and supplemental materials are on-line on the KDHE Stormwater Program webpage at www.kdhe.state.ks.us/stormwater. Answers to questions regarding or additional information concerning construction stormwater permitting requirements can be obtained by calling 785.296.5549.

Sincerely,

Donna Fisher Director's Office

DC/df

The sample IICEP letter following was distributed to the list below:

Eric Davis, U.S. Fish and Wildlife Service, New Jersey Ecological Services Field Office, 927 N Main St, Bldg D, Pleasantville, NJ 08232

U.S. Environmental Protection Agency, Region 2, 290 Broadway, New York, NY 10007-1866, Richard Shaw, Natural Resources Conservation Service, New Jersey State Office, 220 Davidson Ave, 4th Floor, Somerset, NJ 08873

Paul Phifer, Ph.D., U.S. Fish and Wildlife Service, Region 5, 300 Westgate Center Dr, Hadley, MA 01035-9589
 Ruth W. Foster, New Jersey Dept of Environmental Protection, Office of Permit Coordination and Environmental Review, 401 E State St, PO Box 420, Trenton, NJ 08625

New Jersey Division of Fish and Wildlife, Endangered and Nongame Species Program, Department of Environmental Protection, PO Box 420, Trenton, NJ 08625-0420

Ernie Deman, New Jersey Pinelands Commission, 15 Springfield Rd, New Lisbon, NJ 08064

Burlington County, 50 Rancocas Rd, Mount Holly, NJ 08060

Mary Pat Robbie, Burlington County, PO Box 6000, Mount Holly, NJ 08060

Mark Gould, Nanticoke-Lenni-Lenape Indians of New Jersey, 18 E Commerce St, PO Box 544, Bridgeton, NJ 08302

Dwaine Perry, Ramapough Mountain Indians, 189 Stag Hill Rd, Mahwah, NJ 07430

Crown Prince Emperor El Bey Bagby Pamunkey Chief, Powhattan-Renape Nation, Rankokus Indian Reservation, PO Box 255, Westampton Township, NJ 08073

The Honorable Thomas Harper, Mayor of Wrightstown, 21 Saylors Pond Rd, Wrightstown, NJ 08562

The Honorable Ronald Francioli, Mayor of New Hanover Township, 1000 Route 10, PO Box 250, Whippany, NJ 07981

The Honorable Jim Durr, Mayor of North Hanover Township, 41 Schoolhouse Rd, Jacobstown, NJ 08562

The Honorable David Patriarca, Mayor of Pemberton Township, 500 Pemberton-Browns Mills Rd, Pemberton, NJ 08068-1539

The Honorable Denis McDaniel, Mayor of Springfield Township, PO Box 119, Jobstown, NJ 08041

The Honorable Michael Reina, Mayor of Jackson Township, 95 W Veterans Hwy, Jackson, NJ 08527

The Honorable Mike Fressola, Mayor of Manchester Township, 1 Colonial Dr, Manchester, NJ 08759

The Honorable David Leutwyler, Mayor of Plumsted Township, 121 Evergreen Rd, New Egypt, NJ 08533

The Honorable Frank Lautenberg, U.S. Senate, 141 Hart Senate Office Bldg, Washington, DC 20510

The Honorable Robert Menendez, U.S. Senate, 528 Hart Senate Office Bldg, Washington, DC 20510

The Honorable Jon Runyun, House of Representatives, 1239 Longworth HOB, Washington, DC 20515

The Honorable Chris Smith, House of Representatives, 2373 Rayburn House Office Building, Washington, DC 20515

The Honorable Chris Christie, Office of the Governor, PO Box 001, Trenton, NJ 08625

The Honorable Samuel Thompson, New Jersey Senate, 2501 Highway 516, Ste 101, Old Bridge, NJ 08857

The Honorable Robert Clifton, New Jersey Assembly, 516 Route 33 West, Bldg 2, Ste 2, Millstone, NJ 08535

The Honorable Ronald Dancer, New Jersey Assembly, 405 Rt 539, Cream Ridge, NJ 08514



Sample JB MDL IICEP Letter

NATIONAL GUARD BUREAU

3501 FETCHET AVENUE
JOINT BASE ANDREWS MD 20762-5157

NGB/A7AM 16 Sep 13

Environmental Review Coordinator U.S. Environmental Protection Agency, Region 2 290 Broadway New York, NY 10007-1866

Dear Sir/Madam

The United States Air Force (USAF) plans to replace the existing KC-135 aerial refueling fleet with the KC-46A, which will be a new aircraft to the USAF's fleet. As such, the USAF has identified locations for the beddown of a formal training unit (FTU) and the first main operating base (MOB 1), which will both be led by active duty units. The USAF will also beddown the KC-46A at the second main operating base (MOB 2), which will be led by an Air National Guard (ANG) unit.

There are two separate Environmental Impact Statements (EISs) being prepared for the MOB 1/FTU¹ and MOB 2 aircraft beddowns. While you may be familiar with either or both of these actions, this particular letter is in reference only to the MOB 2 beddown action.

The MOB 2 alternative locations for this beddown include:

- Forbes Air National Guard Station (ANGS), Kansas;
- Joint Base McGuire-Dix-Lakehurst (JB MDL), New Jersey;
- Pease ANGS, New Hampshire;
- Pittsburgh ANGS, Pennsylvania; and,
- Rickenbacker ANGS, Ohio.

The EIS is being prepared under the National Environmental Policy Act (NEPA) for the potential beddown of the KC-46A at one of the five alternative locations, including JB MDL in New Jersey. The EIS will assess the potential environmental consequences associated with the beddown of the KC-46A at JB MDL as a replacement to the KC-135. As a result of the Proposed Action, there would be a change to the type of aircraft based at the selected installation; a change to the mix of aircraft using the associated airspace; changes to staffing and manpower at the selected location; changes to the number of airfield operations; as well as minor required construction, building renovation, and facility demolition. There would be no new or modified airspace required to support this undertaking.

.

¹ The FTU alternative installations include Altus Air Force Base (AFB), Oklahoma and McConnell AFB, Kansas. The MOB 1 alternative installations include Altus AFB, Oklahoma; McConnell AFB, Kansas; Fairchild AFB, Washington; and Grand Forks AFB, North Dakota.

Sample JB MDL IICEP Letter

Page 2

At JB MDL, the KC-46A would replace the KC-135 currently based at the installation. Under this alternative, the KC-46A would operate in existing airspace in a similar manner as is currently conducted. There may be a slight increase in operations in the airspace; however, use of this airspace is generally 10,000 feet above ground level and higher, and preliminary analysis indicates that noise levels under the proposal would be similar to existing noise levels with the KC-135 aircraft. Therefore, the National Guard Bureau (NGB) anticipates the area of potential effect for this action to be limited to the portion of the installation where construction, demolition, and renovation activities would occur.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [USC] 4321 *et seq.*), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and Air Force policy and procedures (32 CFR Part 989), the NGB is preparing an EIS in support of this action.

Included as an attachment with this letter is a CD that contains the first two chapters of the EIS: the purpose and need for the action, and the Description of the Proposed Action and Alternatives (DOPAA). We invite you to review these two chapters and provide comments. Your comments are important to us, in that they will help us to identify potential issues associated with implementation of the proposal. We will also send you the Draft EIS upon its release, which is anticipated in early 2014. We will continue to send you updates and information related to this action unless you request otherwise.

The NGB previously sent you a letter indicating that a scoping meeting at JB MDL was to be held Tuesday, June 4, 2013 at both 2-4 p.m. and 6-9 p.m. in New Egypt, New Jersey, and invited you to attend this informational meeting. This letter also documented that the formal scoping period was May 17 through July 5, 2013. Notices for the scoping meeting were posted and published in the *Asbury Park Press* and *Burlington County Times* on May 26 and June 2, 2013. If you would like the NGB to consider your comments for inclusion in the Draft EIS, please forward your comments to the KC-46A MOB2 Project Manager, Ms. Anne Rowe, at NGB/A7AM, Shepperd Hall, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or email to ang.env.comments@ang.af.mil within 30 days of this notification.

If you have any questions regarding this consultation, please contact Ms. Anne Rowe. She can be reached at (240) 612-8636 or anne.rowe.ctr@ang.af.mil.

Sincerely

ROBERT L. DOGAN, GS-13, REM Plans and Requirements Branch

----Original Message-----

From: Popolizio, Carlo [mailto:carlo popolizio@fws.gov]

Sent: Friday, September 27, 2013 10:03 AM To: Rowe, Anne M CTR USAF ANG NGB/A7AM

Subject: National Guard Bureau - Draft EIS - KC-46A refueling tanker

Dear Ms. Rowe:

the USFWS - New Jersey Field Office has no objection to selecting Pease ANGS as the preferred alternative for bed-down of the KC-46A refueling tanker. If you need to contact this office for further coordination on this project, please refer to our project log number 13-CPA-0303.

Best regards, Carlo

--

Carlo Popolizio, Biologist USFWS-NJFO 927 N. Main Street, Pleasantville NJ 08232

Phone: (609) 383-3938 x 32 Fax: (609) 646-0352

"Sell your cleverness and buy bewilderment." Rumi



Chris Christie Governor Kim Guadagno Li Governor

State of New Jersey

THE PINELANDS COMMISSION PO Box 359 New Lisbon, NJ 08064 (609) 894-7300 www.nj.gov/pinelands

General Information: Info@njpines.state.nj.us Application Specific Information: Applinfo@njpines.state.nj.us OF NEW THE STATE OF THE STATE O

Mark S. Lohbauer Chairman Nancy Wittenberg Executive Director

September 30, 2013

KC-46A MOB2 Project Manager, NGB/A7AM Shepperd Hall 3501 Fetchet Avenue Joint Base Andrews, MD 20762-5157

Re:

Application # 1991-1149.059 Joint Base McGuire-Dix-Lakehurst

Dear Applicant:

Thank you for your September 16, 2013 letter asking that the Commission submit comments regarding a proposed Environmental Impact Statement related to the potential location of aerial refueling aircraft at Joint Base McGuire-Dix-Lakehurst (JBMDL). The location of aircraft at JBMDL would not require the completion of an application with the Pinelands Commission. However, the submitted letter indicates that the location of the aircraft at JBMDL may require minor construction, renovation and demolition. Those activities may require the completion of an application with the Pinelands Commission.

The Pinelands Comprehensive Management Plan (CMP) contains many land use and environmental standards. For example, the land use standards of the CMP require that, where feasible, development at military and federal installations be located in that portion of the installation located within the Pinelands Protection Area and avoid the Pinelands Preservation Area District and Forest Area. Examples of CMP environmental standards include a prohibition on most development in wetlands and a required buffer to wetlands, the protection of threatened and endangered plants and animals and stormwater management.

To discuss these standards, you may wish schedule a pre-application conference with our staff. During this conference we can discuss the proposed development and advise of the specific standards of the CMP that appear to be of concern. There is no fee required for a pre-application conference.

Please note that the proposed development requires the completion of an application with the Commission. The CMP requires an application review fee. Applications filed with the Pinelands Commission may not be reviewed or considered complete unless the application review fee and supporting documentation required by the CMP (N.J.A.C. 7:50-1.6) have been submitted.

For your convenience, application submissions consisting of letter or legal sized documents and electronically notarized application forms may now be submitted via email to AppInfo@njpines.state.nj.us. Large reports, plans, checks, and items that have a manually applied seal (i.e., plans, manually notarized items, etc.) must still be submitted as hard copies.

The Pinelands -- Our Country's First National Reserve * 19911149. New Jersey Is An Equal Opportunity Employer - Printed on Recycled and Recyclable Paper If you have any questions, please contact the Regulatory Programs staff. Sincerely, Ernest M. Deman Supervising Environmental Specialist



SPRINGFIELD TOWNSHIP

2159 Jacksonville-Jobstown Road P.O. Box 119 Jobstown, New Jersey 08041-0119 (609) 723-2464 Fax (609) 723-6591

Clerk / Land Use ext. 10 Police ext. 20 Tax Collector ext. 14 Tax Assessor ext. 19 Construction / Zoning ext. 21 Manager ext. 22 Finance ext. 11

October 16, 2013

Ms. Anne Rowe NGB/A7AM Shepperd Hall 3501 Fetchet Avenue Joint Base Andrews, MD 20762-5157

Dear Ms. Rowe,

Please accept this letter on behalf of the Springfield Township Council as a response to your correspondence dated September 16, 2013. Springfield Township Council would like to offer its support of the beddown of the KC-46A at the JB MDL and further offers its support to the National Guard as well.

After review of your correspondence and the EIS that was provided to the Township, Council agrees that there will be no further environmental impact due to the beddown of the KC-46A in place of the KC-135 at the JB MDL.

Please feel free to contact my office if you need anything further.

Sincerely,

Patricia Clayton, RMC

Township Clerk



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

KIMGUADAGNO Lt. Governor BOB MARTIN Commissioner

Division of Fish and Wildlife

P.O. Box 400 Trenton, NJ 08625-0400 Dave Chanda, Director

October 21, 2013

Ms. Anne Rowe, KC-46A MOB2 Project Manager, NGB/A7AM, Shepperd Hall, 3501 Fetchet Avenue, Joint Base Andrews, MD 20762-5157

Dear Ms. Rowe:

The NJ Division of Fish & Wildlife (DFW) appreciates the opportunity to provide comment for the Environmental Impact Statements (EIS's) being prepared for the MOB 1/FTU1 and MOB 2 aircraft beddowns. The NJ DFW feels that the proposed facility additions, new impervious surface areas and changes to the existing fueling infrastructure shown in the "Final Description of the Proposed Action and Alternatives Environmental Impact Statement KC-46A Beddown at Alternative Air National Guard Installations Main Operating Base 2" should have little to no effect on the known nesting area of the Upland Sandpipers, Grasshopper Sparrows and Savannah Sparrows near the center of the runways at McGuire AFB.

In the EIS, a description of other larger aircraft with similar engines using the same runways would be helpful in determining whether or not the replacement the existing KC-135 aerial refueling fleet with the KC-46A would have any effect on the T&E species present.

If we may be of further service, please contact me at (908) 236-2118 or by Email at kelly.davis@dep.state.nj.us

Sincerely,

Kelly Davis
NJ Division of Fish & Wildlife
Office of Environmental Review

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The sample IICEP letter following was distributed to the list below:

U.S. Environmental Protection Agency, Region 1, 5 Post Office Square, Ste. 100, Boston, MA 02109-3912

U.S. Fish and Wildlife Service Region V, 300 Westgate Center Dr, Hadley, MA 01035

New Hampshire Department of Environmental Services, 29 Hazen Dr, PO Box 95, Concord, NH 03302

New Hampshire Fish and Game Department, 11 Hazen Dr, Concord, NH 03301

New Hampshire State Port Authority, 555 Market St, Portsmouth, NH 03801

New Hampshire Department of Transportation, Bureau of Environment, JOM Building, Room 160, 7 Hazen Dr, Concord, NH 03302

New Hampshire Coastal Program, Department of Environmental Services, 50 International Dr, Ste 200, Portsmouth, NH 03801

New Hampshire Office of Energy and Planning, 57 Regional Dr, Ste 3, Concord, NH 03301

New Hampshire Department of Environmental Services, Wetlands Bureau, PO Box 95, Concord, NH 03302

Town of Newington Planning Department, 205 Nimble Hill Rd, Newington, NH 03801

Portsmouth City Hall, Community Development Department, 1 Junkins Ave, Portsmouth, NH 03801

Pease Development Authority, 360 Corporate Dr, Portsmouth, NH 03801

The Honorable Kelly Ayotte, U.S. Senate, 144 Russell Senate Office Bldg, Washington, DC 20510

The Honorable Jeanne Shaheen, U.S. Senate, 520 Hart Senate Office Bldg, Washington, DC 20510

The Honorable Carol Shea-Porter, House of Representatives, 1530 Longworth House Office Bldg, Washington, DC 20515

The Honorable Martha Clark, New Hampshire Senate, State House, Room 115, 107 N Main St, Concord, NH 03301

The Honorable Joe Scarlotto, New Hampshire Representative, 130 Oxford Ave, Portsmouth, NH 03801-4126

The Honorable Eric Spear, Mayor of Portsmouth, 1 Junkins Ave, Portsmouth, NH 03801

The Honorable Maggie Hassan, Office of the Governor, State House, 107 N Main St, Concord, NH 03301



Sample Pease ANGS IICEP Letter

NATIONAL GUARD BUREAU

3501 FETCHET AVENUE
JOINT BASE ANDREWS MD 20762-5157

NGB/A7AM 16 Sep 13

U.S. Environmental Protection Agency, Region 1 5 Post Office Square, Ste. 100 Boston, MA 02109-3912

Dear Sir/Madam

The United States Air Force (USAF) plans to replace the existing KC-135 aerial refueling fleet with the KC-46A, which will be a new aircraft to the USAF's fleet. As such, the USAF has identified locations for the beddown of a formal training unit (FTU) and the first main operating base (MOB 1), which will both be led by active duty units. The USAF will also beddown the KC-46A at the second main operating base (MOB 2), which will be led by an Air National Guard (ANG) unit.

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The MOB 2 alternative locations for this beddown include:

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- · Rickenbacker ANGS, Ohio.

The EIS is being prepared under the National Environmental Policy Act (NEPA) for the potential beddown of the KC-46A at one of the five alternative locations, including Pease ANGS in New Hampshire. The EIS will assess the potential environmental consequences associated with the beddown of the KC-46A at Pease ANGS as a replacement to the KC-135. As a result of the Proposed Action, there would be a change to the type of aircraft based at the selected installation; a change to the mix of aircraft using the associated airspace; changes to staffing and manpower at the selected location; changes to the number of airfield operations; as well as minor required construction, building renovation, and facility demolition. There would be no new or modified airspace required to support this undertaking.

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¹ The FTU alternative installations include Altus Air Force Base (AFB), Oklahoma and McConnell AFB, Kansas. The MOB 1 alternative installations include Altus AFB, Oklahoma; McConnell AFB, Kansas; Fairchild AFB, Washington; and Grand Forks AFB, North Dakota.

Sample Pease ANGS IICEP Letter

Page 2

At Pease ANGS, the KC-46A would replace the KC-135 currently based at the installation. Under this alternative, the KC-46A would operate in existing airspace in a similar manner as is currently conducted. There may be a slight increase in operations in the airspace; however, use of this airspace is generally 10,000 feet above ground level and higher, and preliminary analysis indicates that noise levels under the proposal would be similar to existing noise levels with the KC-135 aircraft. Therefore, the National Guard Bureau (NGB) anticipates the area of potential effect for this action to be limited to the portion of the installation where construction, demolition, and renovation activities would occur.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [USC] 4321 *et seq.*), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and Air Force policy and procedures (32 CFR Part 989), the NGB is preparing an EIS in support of this action.

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The NGB previously sent you a letter indicating that a scoping meeting at Pease ANGS was to be held Thursday, June 6, 2013 at both 2-4 p.m. and 6-9 p.m. in Portsmouth, New Hampshire, and invited you to attend this informational meeting. This letter also documented that the formal scoping period was May 17 through July 5, 2013. Notices for the scoping meeting were posted and published in the *Portsmouth Herald* on May 26 and June 2, 2013. If you would like the NGB to consider your comments for inclusion in the Draft EIS, please forward your comments to the KC-46A MOB2 Project Manager, Ms. Anne Rowe, at NGB/A7AM, Shepperd Hall, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or email to ang.env.comments@ang.af.mil within 30 days of this notification.

If you have any questions regarding this consultation, please contact Ms. Anne Rowe. She can be reached at (240) 612-8636 or anne.rowe.ctr@ang.af.mil.

Sincerely

ROBERT L. DOGAN, GS-13, REM Plans and Requirements Branch



John P. Bohenko City Manager

CITY OF PORTSMOUTH

City Hall, One Junkins Avenue Portsmouth, New Hampshire 03801 jpb@cityofportsmouth.com (603) 610-7201

October 15, 2013

Ms. Anne Rowe NGB/AZAM, Shepperd Hall 3501 Fetchet Avenue Joint Base Andrews, MD 20162-5157

Dear Ms. Rowe:

Thank you for the opportunity to comment on the Unites States Air Force effort to replace the existing KC-135 aerial refueling fleet with the KC-46A. We are pleased that the US Air Force has identified the Pease Air National Guard Station as one of the sites for beddown of this aircraft in the second main operating base (MOB 2) EIS.

Upon review of this document with my staff, this action has the effect of bringing a more modernized tanker fleet and airborne refueling technology to the Pease ANGS and with it upgrades and renovations to the Pease facility, where these aircraft would be stationed under this alternative.

By way of this letter, I would like to extend the City's support of the proposed MOB-2 beddown by an Air National Guard unit here in Portsmouth at Pease. It is our understanding that this new aircraft will provide a more effective and versatile tanker design that will better serve the current fleet of aircraft which rely on airborne refueling. The City of Portsmouth has a long tradition of supporting our nation's military and believes the changes proposed with the addition of the KC-46A will continue that proud tradition.

Please let me know if you have any questions as you move ahead with the EIS process and if you require any additional information, please do not hesitate to contact me at (603)610-7202.

la ex

Sincere

John P. Bohenko City Manager

c.: Honorable Mayor Eric Spear and City Council Members



The State of New Hampshire

DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

October 16, 2013

Ms. Anne Rowe KC-46A MOB2 Project Manager NGB/A7AM, Shepperd Hall 3501 Fetchet Avenue Joint Base Andrews, MD 20762-5157

NHDES COMMENTS - DRAFT CHAPTERS 1 & 2 - NEPA DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) - KC-46A BEDDOWN (MOB2) -PEASE AIR NATIONAL GUARD STATION (ANGS), PORTSMOUTH, NEW **HAMPSHIRE – SEPTEMBER 2013**

Dear Ms. Rowe:

The New Hampshire Department of Environmental Services (DES) has completed its review of the subject chapters and provides the enclosed comments for your consideration. The initial drafts of chapters one and two represented the focus of the agency's review. Topics addressed included storm water management, aboveground petroleum management systems and air emissions modeling.

DES would like to thank you for the opportunity to comment on the early stages of the DEIS. It is our intent to continue to serve as a partner in your effort to evaluate the Pease ANGS in Portsmouth, New Hampshire as a beddown site for the KC-46As. If there are questions, please contact me as needed.

Sincerely,

Timothy W. Drew

Administrator

Public Information & Permitting Office of the Commissioner

Enc. Cc:

Thomas S. Burack, Commissioner, NH DES Vicki V. Quiram, Assistant Commissioner, NH DES Harry T. Stewart, Director, Water Division, NH DES Michael Wimsatt, Director, Waste Management Division, NH DES Craig Wright, Director, Air Resources Division, NH DES Jeffrey Andrews, Water Division, NH DES Gregg Comstock, Water Division, NH DES Michael Juranty, Waste Management Division, NH DES Michael Fitzgerald, Air Resources Division, NH DES Thomas P. Ballestero, Director, Storm Water Center, UNH, Durham NH

DES Web site: www.des.nh.gov P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095 Telephone: (603) 271-3503 • Fax: (603) 271-2867 • TDD Access: Relay NH 1-800-735-2964



DRAFT CHAPTERS 1 & 2 - NEPA DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) – KC-46A BEDDOWN (MOB2) – PEASE AIR NATIONAL GUARD STATION (ANGS), PORTSMOUTH, NEW HAMPSHIRE – SEPTEMBER 2013

NH DES COMMENTS

October 16, 2013

Comment 1. Storm Water Management

Based on the figures in Table 2.3 (total disturbance 117,173 square feet and total new impervious surface 26,865 square feet), the Air National Guard Station (ANGS) will need both the U.S. Environmental Protection Agency (U.S. EPA) Construction General Permit (http://des.nh.gov/organization/divisions/water/stormwater/construction.htm) and an NH DES Alteration of Terrain Permit (http://des.nh.gov/organization/divisions/water/aot/permit_aot.htm). If the project includes construction dewatering, the ANGS may also need either the Dewatering General Permit (DGP - see http://www.epa.gov/region1/npdes/dewatering.html) or the Remediation General Permit (RGP - see http://www.epa.gov/region1/npdes/rgp.html), which are typically required for dewatering groundwater containing contaminants. ANGS would not need to address U.S. EPA Municipal Separate Storm Sewer System General Permit (MS4 GP) requirements since Newington is not an MS4, but would need to meet any applicable requirements in the Pease Tradeport's individual National Pollutant Discharge Elimination System Permit (NH0090000) that contains conditions on several storm water outfalls (see attached NPDES Permit).

This additional impervious surface will create the potential for additional pollutant loads to be discharged to the impaired waters in the vicinity, including Great Bay. NH DES suggests that the ANGS's goal should be "hold the loads" for any pollutants for which nearby waters are impaired. This could mean deploying structural Best Management Practices such as the University of New Hampshire's subsurface gravel wetlands or a bioretention hybrid (internal storage volume). If this is considered a federal site or construction project, the ANGS would also need to comply with the storm water management requirements of Section 438 of the

DRAFT CHAPTERS 1 & 2 - NEPA DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) - KC-46A
BEDDOWN (MOB2) - PEASE AIR NATIONAL GUARD STATION (ANGS)
PORTSMOUTH, NEW HAMPSHIRE- SEPTEMBER 2013

NH DES Comments October 16, 2013 Page 1 of 3 Energy Independence and Security Act (see http://water.epa.gov/polwaste/nps/section438.cfm). Information on subsurface gravel wetlands can be found in the UNH Stormwater Center's annual report (see

http://unh.edu/unhsc/sites/unh.edu.unhsc/files/docs/UNHSC.2012Report.10.10.12.pdf) or by contacting the Center (see http://www.unh.edu/unhsc/contact). For information on the bioretention hybrids, which are a fairly recent design, however some exist presently in seacoast New Hampshire, contact Dr. Thomas Ballestero by telephone at (603) 862-1405 or by email at tom.ballestero@unh.edu.

Comment 2. Petroleum Management

The proposed project for modifying the refueling hydrants and lines would be regulated by the NH DES Aboveground Storage Tank (AST) Program

(http://des.nh.gov/organization/divisions/waste/orcb/ocs/astp/index.htm). This project is detailed on page 2-32 "Project #7", shown on page 2-33 of the DEIS, and discussed at the top of page 2-36. The New Hampshire Air National Guard, Civil Engineering Squadron, is aware of the NH DES AST Program requirements and has been in preliminary contact with Bob Daniel in the Plan Review Subsection to discuss the scope of future improvements. The AST Program welcomes the proposed modifications that would add interstitial monitoring and secondary containment to the hydrants and lines.

Comment 3. Air Emissions Analysis

Based on the NH DES Air Resources Division's (ARD) review of the above referenced project description, we concur that the project is compatible with the plans, programs, and objectives of ARD, and that the project should have no significant environmental impact to local or regional air quality.

ARD conducted modeling to determine potential air emissions, based on the type of aircraft to be used and the number of sorties as noted in the description of the proposed action using the FAA's Emission and Dispersion Modeling System (EDMS). Results are shown below:

Pease Air National Guard Base

Emissions for KC-135 vs. Proposed KC-46As

·		Emissions	s in Tons	Per Year	
Aircraft Scenario	co	NOx	PM	SOx	VOC
KC-135R, CFM56-2A engines, 10,204 sorties	259.9	392.9	4.2	36.9	21.1
KC-46A, PW4062 engines, 12,799 sorties	467.4	359.1	5.6	30.9	139.9
Difference	207.4	-33.8	1.4	-6.1	118.8
Rockingham county total, tons per year*	50,578	8,235	8,458	3,577	7,939

DRAFT CHAPTERS 1 & 2 - NEPA DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) - KC-46A BEDDOWN (MOB2) - PEASE AIR NATIONAL GUARD STATION (ANGS) PORTSMOUTH, NEW HAMPSHIRE- SEPTEMBER 2013

NH DES Comments October 16, 2013 Page 2 of 3 % change in Rockingham county emissions with KC-46A 0.41% -0.41% 0.02% -0.17% 150% aircraft and 2,595 additional scrties

Notes

- 1) Emissions were estimated with EDMS 5.1.4.1
- 2) A Boeing 767-200ER with PW4062 engines was used to represent the KC-46A
- 3) A sortie was considered equal to a complete landing-takeoff operation (LTO)
- * National Emissions Inventory reporting for 2011

As shown, emissions for oxides of nitrogen and sulfate (NO_x and SO_x) are expected to decrease, while carbon monoxide (CO), particulate matter (PM) and volatile organic compounds (VOC) emission will increase. However, based on their contribution to area-wide emissions, those originating from aircraft are not expected to have a significant impact on area air quality or attainment status.

During proposed construction activities, we advise that appropriate measures be taken to limit emissions from diesel fueled vehicles. These measures include, but are not limited to:

- o Preventing, abating and controlling fugitive dust;
- o Limiting idling of construction vehicles.

Potential traffic related impacts due to construction vehicles will be evaluated via the Interagency Consultation Process as outlined in the federal Clean Air Act.

###

DRAFT CHAPTERS 1 & 2 - NEPA DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) – KC-46A BEDDOWN (MOB2) – PEASE AIR NATIONAL GUARD STATION (ANGS) PORTSMOUTH, NEW HAMPSHIRE- SEPTEMBER 2013

NH DES Comments October 16, 2013 Page 3 of 3

Page 1 of 18 Permit No.: NH0090000

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§1251 et seq.; the "CWA"),

Pease Development Authority

is authorized to discharge from a facility located at

135 Corporate Drive Portsmouth, NH

to receiving waters named: Piscataqua River, Hodgkins Brook, Flagstone Creek, McIntyre Brook, and Harvey's Creek, (Hydrologic Unit code 01060003), all class B waters,

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on 30 days from the date of signature.

This permit and the authorization to discharge expire at midnight, 5 years from the date of issuance.

This permit supersedes the permit issued on September 30, 1992.

This permit consists of 18 pages in Part I including effluent limitations, monitoring requirements, etc., Attachments A and B, (8 pages and 1 page, respectively); Sludge Compliance Guidance (72 pages) and 35 pages in Part II including General Conditions and Definitions.

Signed this & day of August, 200

Office of Ecosystem Protection Environmental Protection Agency

Boston, MA



A. BFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS 1. During the period beginning on the effective date and leating through the expination date, the permittee is authoritied to discharge from outfall 005 (treated wastewater) to the Piscandard River. This decharge shall be limited and monitored by the permittee is specified below: Monitoring the period period of the period beginning on the effective date and leating through the permittee is specified below: Monitoring through the period period of the permittee is authorized to discharge from outfall 005 (treated Effertue). Monitoring through the period period of the permittee is authorized to discharge from outfall 005 (treated Monitoring Monitoring through the period of the permittee is authorized to discharge from outfall 005 (treated Monitoring Monitoring Monitoring through the period of the permittee is authorized to discharge from the period of the permittee is authorized to discharge through the period of the permittee is authorized to discharge on the period of the permittee is authorized through the period of the permittee is authorized to discharge through the permittee is authorized to discharge or through the permittee is authorized to discharge combining with other streams. Average monitoring through the permittee is authorized to discharge combining with other streams. Average monitoring through the permittee is authorized to discharge combining with other streams. Average monitoring through the permittee is authorized to discharge combining with other streams. Average monitoring through the permittee is authorized to discharge combining with other streams. Average monitoring through the permittee is authorized to discharge combining with other streams. Average monitoring through through through the permittee is authorized to discharge combining with other s	FELUENT LIMITATIONS AND MO 1. During the period beginning or wastewater) to the Piscataqua Rivout Characteristics Average Monthly (MGD) 300 lbs/day 300 lbs/day Chlorine Residual, Effluent Toxicity LC50 _{3,8}	ONITORING REQUIREN of the effective date and la fer. This discharge shall be bischarge Limitations Average Maxin Weekly Daily 450 lbs/day 500 lb Range of 6.5 - 8.0 standar	sting through the expiral limited and monitored num Average Monthly Report s/day 30 mg/l dunits (see I.E.1.a) 14/100 mf	tion date, the permittee a Mole by the permittee a Mole by the permittee a Mole by the mole by mg/l 45 mg/l 14/100 ml	ittee is authorized t s specified below: nitoring Requirement Maximum Daily Report 50 mg/l 50 mg/l 14/100 ml	to discharge from or Measurement Frequency Continuous 2/week 1/day 2/day	Sample Sample Type Recorder, 24-hour composite Crab Grab Grab
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1.0 mg/l 2 50 % Report	Effluent Toxicity LC50 _{3,6}	1 1	0.75 mg/l	1	1.0 mg/l	2/day	Grab
2 50% Report	LC50 _{3,6}	#: -	I	:	% US <		
2 50% Report			ï		% US <		
Report	Ammonia Nitrogen as Nitrogen (mg/l)			{	1000	2/year	24-hour composite
Report Report Report Report Report Report Report Report	Total Recoverable Cadmium (mg/1),				Report	2/year	24-hour composite
Report Report Report Report Report Report Report Report	Total Recoverable Chromium (mg/l),			•	Report	2/year	24-hour composite
Report Report Report Report Report Report	Total Recoverable Copper (mg/l),						
Report Report Report	Total Recoverable Nickel (mg/l),			•		2/year	
Report Report	Total Recoverable Lead (mg/l),				Keport	2/year	24-hour composite
Report	i otal Recoverable Zinc (mg/l),				Report	Z/yeat	24-hour composite
Report				,		13 cai	z4-nour composite
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	es shall be taken after treatment, but prior	to discharge combining with	n other streams.			,	,
	ge 3 for explanation of subscripts.						
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Explanation of subscripts on page 2

- (1) The effluent flow shall be continuously measured and recorded using a flow meter and totalizer.
- (2) State certification requirement.
- (3) Fecal Coliform shall be tested using test method 9222 D or 9221 C E found in <u>Standard Methods for the Examination of Water and Wastewater</u>, 18th or <u>subsequent Edition(s)</u>, as approved in 40 CFR part 136. The permittee may use membrane filtration, 9222 D, in lieu of, the Most Probable Number, 9221 C E, after it has been demonstrated to the satisfaction of the NHDES-WD that method 9222 D generates comparable results, as per detailed in Standard Methods 9222 D.

The average monthly and average weekly values for fecal coliform shall be determined by calculating the geometric mean and the results reported. Not more than 10 percent of the collected samples (over a monthly period) shall exceed a Most Probable Number (MPN) of 43 per 100 ml for a 5-tube decimal dilution test. Furthermore, all fecal coliform data collected must be submitted with the monthly Discharge Monitoring Reports (DMRs).

- (4) Total Chlorine Residual shall be measured using any one of the following three methods listed below:
 - (a) DPD spectrophotometric (colorimetric). EPA no 330.5 or <u>Standard Methods</u> [18th or subsequent edition(s), as approved in 40 Code of Federal Regulations (CFR) part 136], no 4500-Cl G.
 - (b) DPD titrimetric (ferrous titrimetric) EPA no. 330.4 or <u>Standard Methods</u> [18th or subsequent edition(s), as approved in 40 CFR part 136], no 4500-Cl F.
 - (c) Amperometric titration. EPA no. 330.1 or Standard Methods [18th or subsequent edition(s), as approved in 40 CFR part 136], no 4500-Cl D, or ASTM no. D1253-86(92).
- (5) The whole effluent toxicity (WET) sample shall be taken prior to mixing with the effluent from any other source (the Town of Newington). The permittee shall conduct 48-hour static acute toxicity test on effluent samples using two species, <u>Mysisopsis bahia</u> and <u>Menidia beryllina</u> following the protocol in Attachment A. Toxicity test samples shall be collected and test completed during the 3 month periods ending June 30th and September 30th, respectively, each year. Toxicity test results are to be submitted by the 15th day of the month following the end of the quarter sampled.

This permit shall be modified, or alternatively, revoked and reissued to incorporate additional toxicity testing requirements, including chemical specific limitations, if the results of these toxicity tests indicate the discharge causes an exceedance of any state water quality criterion. Results from these toxicity tests are considered "new information" and the permit may be modified as provided in 40 CFR §122.62(a)(2).

- (6) LC50 is defined as the concentration of wastewater (effluent) that cause mortality to 50 percent of the test organisms. The "50 percent or greater" limitation is defined as a sample which is composed 50% or greater effluent. A sample composed of 50% or greater effluent shall cause no greater than a 50% mortality rate in the effluent sample. This is a maximum daily limit.
- (7) For each whole effluent toxicity test the permittee shall report on the appropriate Discharge Monitoring Report (DMR), the concentrations of the following pollutants: Ammonia Nitrogen as Nitrogen; total recoverable aluminum, cadmium, chromium, copper, lead, nickel, and zinc found in the 100 percent effluent sample. All these aforementioned chemical parameters shall be determined to have at least the minimum quantification level shown in Attachment A on page A-7, or as amended. Also the permittee should note that all chemical parameter results must still be reported in the appropriate toxicity report.

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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CON'T.)

- The discharge shall not cause a violation of the water quality standards of the receiving water.
- 3. The discharge shall be adequately treated to insure that the surface water remains free from pollutants in concentrations or combinations that settle to form harmful deposits, float as foam, debris, scum, or other visible pollutants. It shall be adequately treated to insure that the surface waters remain free from pollutants which produce odor, color, taste or turbidity in the receiving waters which is not naturally occurring and would render it unsuitable for its designated uses.
- 4. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both BOD, and TSS. The percent removal shall be based on a comparison of average monthly influent versus effluent concentrations.
- 5. When the effluent discharged for a period of 90 consecutive days exceeds 80 percent of the 1.2 MGD design flow (0.96 MGD), the permittee shall submit to the permitting authorities a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans. Before the design flow will be reached, or whenever treatment necessary to achieve permit limits cannot be assured, the permittee may be required to submit plans for facility improvements.
- 6. All POTWs must provide adequate notice to both EPA and New Hampshire Department of Environmental Services-Water Division (NHDES-WD) of the following:
 - Any new introduction of pollutants into the POTW from an indirect discharger in a primary industrial category(see 40 CFR §122 Appendix A, as amended) discharging process water; and
 - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the treatment works at the time of issuance of the permit.
 - For purposes of this paragraph, adequate notice shall include information on:
 i. The quality and quantity of effluent introduced into the facility; and
 - any anticipated impact of the change on the quantity or quality of effluent to be discharge from the facility.
- A user may not introduce into any POTW any pollutant(s) which cause pass through or interference. The terms "user", "pass through" and "interference" are defined in 40 CFR § 403.3.

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- 8. Within 90 days of the effective date of this permit, the permittee shall submit to EPA and NHDES-WD a current list of all industries discharging industrial waste to the municipal wastewater treatment plant. At a minimum, the list shall indicate the name and address of each industry, along with the following information: telephone number; contact person; facility description; production quantity; products manufactured; industrial processes used; chemicals used in processes; existing level of pretreatment; and list of existing discharge permits.
- 9. Within 90 days of the effective date of this permit, the permittee shall submit to EPA and NHDES-WD a copy of discharge permit(s) issued to each industry discharging incustrial waste to the municipal wastewater treatment plant. At a minimum, each permit shall contain the following: effective dates; flow and applicable pollutant limits; self monitoring, reporting, compliance monitoring and inspection provisions; and enforcement criteria. In addition, the permittee shall submit to EPA and NHDES-WD a copy of its current sewer use ordinance and a copy of any other document granting legal authority to issue permits to industries discharging industrial waste to the municipal wastewater treatment plant. If industrial permitting authority does not exist as of the effective date of this permit, the permittee is requested to submit to the NHDES-WD a proposed plan and implementation schedule for adopting such authority and implementing an industrial permitting system. The permittee shall also submit to NHDES and EPA a copy of any agreement between PDA and the City of Portsmouth regarding the responsibility for the operation of the Industrial Pretreatment Program
- 10. The permittee shall submit to EPA and NHDES-WD the name of any Industrial User (IU) subject to Categorical Pretreatment Standards pursuant to 40 CFR §403.6 and 40 CFR Chapter I, Subchapter N (Parts 405-415; 417-436; 439-440; 443; 446-447; 454-455; 457-461; 463-469; and 471, as amended) who commences discharge to the POTW after the effective date of this permit. This reporting requirement also applies to any other IU that discharges an average of 25,000 gallons per day or more of process wastewater in the POTW (excluding sanitary; noncontact cooling; and boiler blowdown wastewater) or contributes a process wastewater which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the POTW; or is designated as such by the control authority as defined in 40 CFR §403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR §403.8(f)(6)).
- 11. In the event that the permittee receives reports (baseline monitoring reports; 90-day compliance reports; periodic reports on continued compliance, etc.) From users subject to Categorical Pretreatment Standards, the permittee shall forward all copies of these reports within ninety (90) days of their receipt to EPA and NHDES-WD.
- The permittee shall not discharge into the receiving water any pollutant or combination of pollutants in toxic amounts.

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- 13. The permittee shall provide a copy of the available reports on the effluent concentration from all Groundwater Treatment Systems to the sanitary sewer. If the concentrations of the pollutants in these discharges to the sanitary sewer are less than the Maximum Contaminant Levels required by the Drinking Water regulations, the permittee may certify this condition in writing in lieu of reporting analytical results.
 - Quarterly reporting shall begin within 90 days following the effective date of this permit and provide the most current results available.
 - Estimates of the average monthly flow and the maximum daily flow at each groundwater treatment system shall be reported for each month.
- All existing manufacturing, commercial, mining, and silvercultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR§122.42):
 - a. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. One hundred micrograms per liter (100 μ g/l);
 - Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1mg/l) for antimony;
 - Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
 - iv. Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and New Hampshire regulations.
 - b. That any activity has occurred or will occur which would result in the discharge, on a non routine or infrequent basis of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. Five hundred micrograms per liter (500 μ g/l);
 - ii. One milligram per liter (1 mg/l) for antimony;
 - Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
 - iv. Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and New Hampshire regulations.
 - That they have begun or expect to begin to use or manufacture as an intermediate of final product or byproduct any toxic pollutant which was not reported in the permit application.
- 15. This permit shall be modified, or alternatively, revoked and reissued to include effluent standards or limitation on any pollutants not limited in the permit if the results of an ongoing or future investigation indicates the presence of any toxic pollutant with the reasonable potential to cause water quality violations.

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B. STORM WATER LIMITATIONS AND MONITORING REQUIREMENTS

PART I

1. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall 001 (storm water runoff from industrial activity) to Hodgkins Brook. Samples shall be collected down stream from the confluence of the two streams near the intersection of Rye Street and Rockingham Drive. This discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristics		Discharge Limitations	ations	Monitoring Requirements	uirements
	Average Monthly	Average Weekly	Maximum <u>Daily</u>	Measurement Frequency	Sample Type
Flow (MGD)	1	1	Report	Monthly,	Estimate
BOD (mg/l)	•		Report	Monthly,	Grab ₂
Volatile Organics Scan (mg/l)3	•	***	Report	2/year ₁	Grab,
Polynuclear Aromatic Hydrocarbons (PAHs) (µg/l),	!	i	Report	2/year _t	Grab ₂
Hd	Range of 6.5 - 8	Range of 6.5 - 8.0 standard units		Monthly,	Grab ₂
Oil & Grease (mg/l),	1	I	10	Monthly1	Grab ₂
Surfactants (mg/l)	0.2	***	1	Monthly,	Grab ₂
Total Recoverable Iron (mg/l)	1	1	Report	Monthly,	Grab,
Total Recoverable Lead (mg/l)	•	1	Report	$Monthly_1$	$Grab_2$
Trichloroethylene (mg/l) ₆	1	-	Report	1/quarter	Grab ₂

There shall be no discharge of floating solids or visible foam. See page 11 for explanation of subscripts

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B. STORM WATER LIMITATIONS AND MONITORING REQUIREMENTS	IONS AND MC	NITORING REC	VUREMENTS		
 During the period beginning on the effective runoff from industrial activity) to Flagstone Cre monitored by the permittee as specified below: 	ginning on the e tivity) to Flagst tee as specified	ffective date and one Creek. Samp below:	lasting through the expiration of the shall be taken at the culvert	late, the permittee is author outlet at the end of the ai	 During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall 002 (storm water runoff from industrial activity) to Flagstone Creek. Samples shall be taken at the culvert outlet at the end of the aircraft apron. This discharge shall be limited and monitored by the permittee as specified below:
Effluent Characteristics		Discharge Limitations	<u>imitations</u>	Monitoring Requirements	<u>uirements</u>
	Average Monthly	Average Weekly	Maximum <u>Daily</u>	Measurement <u>Frequency</u>	Sample Type
Flow (MGD)	1		Report	Monthly,,	Estimate
BOD (mg/l)	1	1	Report	Monthly,,	Grab
Volatile Organics Scan (mg/l)3	1	1	Report	2/year,	Grab,
Polynuclear Aromatic Hydrocarbons (PAHs) (µg/l),	ł	1	Report	2/year,	Grab,
Hd	Range of 6.5	Range of 6.5 - 8.0 standard units	its	Monthly,,	Grab,
Oil & Grease (mg/l),	1	194	10	Monthly,,	, Grab ₂
Surfactants (mg/l)	0.2	1	1	Monthly,,	Grab ₂
Trichloroethylene $(mg 1)_{6}$	1		Report	1/quarter	Grab ₂
TSS (mg/l)	1	-	Report	Monthly,,	Grab ₂
COD (mg/l)	1	!	Report	Monthly _{1,} ,	Grab ₂
Primary Deicing Chemical (mg/I) ₈	8	I	Report	Monthly _{1,7}	Grab ₂
Total Recoverable Arsenic, Iron, and Zinc	*****	l	Report	Monthly _{1,7}	$Grab_2$
There shall be no discharge of floating solids or visible foam. See Page 11 for explanation of subscripts	ating solids or v bscripts	isible foam.			

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B. STORM WATER LIMITATIONS AND MONITORING REQUIREMENTS

PART I

3. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall 003 (storm water runoff from industrial activity) to McIntyre Brook. Samples shall be taken at the overflow from the oil water separator and when flow occurs in the bypass channel, collect an additional representative sample downstream for the confluence of both channels. This discharge shall be limited and monitored by the permittee as

Effluent Characteristics		Discharge Limitations	<u>stions</u>	Monitoring Requirements	nirements
	Average Monthly	Average Weekly	Maximum Daily	Measurement <u>Frequency</u>	Sample Type
Flow (MGD)	I	-	Report	Monthly _{1,7}	Estimate
BOD (mg/l)		44.00	Report	Monthly _{1,7}	Grab,
Volatile Organics Scan (mg/l)3	l		Report	2/year,	Grab ₂
Polynuclear Aromatic Hydrocarbons (PAHs) (µg/l)4		1	Report	2/year,	Grab,
Hq	Range o	Range of 6.5 - 8.0 standard units	d units	Monthly,,7	Grab,
Oil & Grease (mg/l),	1	***	10	Monthly1.7	Grab,
Surfactants (mg/l)	0.2			Monthly _{1,7}	Grab ₂
Trichloroethylene (mg/l),	1	:	Report	1/quarter	Grab,
COD and TSS (mg/l)	l	*****	Report	Monthly _{1,7}	Grab ₂
Primary Deicing Chemical (mg/l) ₈	1	****	Report	Monthly,,	Grab,
Total Recoverable Iron and Zinc (mg/l)	ł	-	Report	Monthly,,	Grab,

There shall be no discharge of floating solids or visible foam. See page 11 for explanation of subscripts

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luent D (m D (m factar factar factar , Les	B. STORM WATER LIMITATI	ONS AND MONI	TORING REQUIE	LEMENTS		
w (MGD) w (MGD) arile Organics Scan (mg/l), factants (mg/l), factants (mg/l), factorethylene (mg/l), theorethylene (mg/l), theorethylene (mg/l), theorethylene (mg/l), the shall be no discharge of floating is page 11 for explanation of subscrip	4. During the period berroof from industrial a	ginning on the effe ctivity) to Harveys	ctive date and last Creek. This disch	ing through the expiration d arge shall be limited and m	ate, the permittee onitored by the per	is authorized to discharge from outfall 004 (storm water mittee as sneetifed below
W (MGD) Average Monthly Average Weekly Daily Daily Report Monthly D (mg/l) — Report Monthly, attle Organics Scan (mg/l), attle Organics of floating solids or visible foam. Report 2/year,	Effluent Characteristics		Discharge Limit	ations	Monitoring Requ	irements
W (MGD) — Report Monthly, artile Organics Scan (mg/l), — Report Report Monthly, artile Organics Scan (mg/l), — Range of 6.5 - 8.0 standard units Monthly, factants (mg/l), — Monthly, factants (mg/l), — Monthly, factants (mg/l), — Monthly, factants (mg/l), — Report I/quarter al Recoverable Cyanide, — Report Monthly, i.t. and, Niekel and Zinc (mg/l), — Report Monthly, re shall be no discharge of floating solids or visible foam.		Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Tyne
D (mgl) — Report 2/year, artile Organics Scan (mg/l), — Report 2/year, ymuclear Atomatic — Report 2/year, frocarbons (PAHis) (u.g/l), — — 10 & Grease (mg/l), — — Monthly, factants (mg/l), — — Monthly, Alsocoverable Cyanide, — Report I/quarter al Recoverable Cyanide, — Report Monthly, tre shall be no discharge of floating solids or visible foam. Report Monthly,	Flow (MGD)	1		Report	Monthly,	Estimate
According Scan (mg/l),	ВОD (mg/l)	1	******	Report	Monthly,	Grab ₂
frocarbons (PAHs) (ug/l), Range of 6.5 - 8.0 standard units Ronthly, factants (mg/l), factants (mg/l), factants (mg/l), factants (mg/l), factorethylene (mg/l), factor	Volatile Organics Scan (mg/l)3	i		Report	2/year ₁	Grab,
Range of 6.5 - 8.0 standard units Monthly, factants (mg/l), ————————————————————————————————————	Polynuclear Aromatic Hydrocarbons (PAHs) (µg/1),	-	I	Report	2/year,	Ота b ₂
10 Monthly, Monthly, Report I/quarter Report Monthly,	Hď	Range	of 6.5 - 8.0 standa	rd units	Monthly,	Grab,
Report 1/quarter Report Monthly,	Oil & Grease (mg/l),	ı	ı	10	Monthly,	Grab
Report 1/quarter Report Monthly,	Surfactants (mg/l)	0.2	ŀ	ŀ	Monthly,	Grab,
Report Monthly,	Trichloroethylene (mg/l),	I	1	Report	1/quarter	Grab,
There shall be no discharge of floating solids or visible foam. See page 1 I for explanation of subscripts	Total Recoverable Cyanide, Iron, Lead, Nickel and Zinc (mg/	@	1	Report	$Monthly_1$	Grab,
	There shall be no discharge of flo See page 11 for explanation of su	ating solids or visi bscripts	ble foam.			

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Explanation of subscripts on pages 7 - 10

- (1) If a sample cannot be collected due to adverse weather conditions, the permittee shall submit with the monthly DMR an explanation of why the sample could not be collected. Adverse conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as high winds, blizzard conditions, ice storms etc) or otherwise make the collection of a sample impractical.
- (2) Grab samples shall be collected from a discharge resulting from a precipitation event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. The grab sample should be taken when pollutant concentrations in the storm water are expected to be at a maximum.
- (3) Samples for the Volatile Organics Scan shall be taken during April and September. Volatile Organics are listed in 40 CFR §122, Appendix D, Table II.
- (4) The sample for the Polynuclear Aromatic Hydrocarbons (PAHs) shall be taken concurrently with that for the Volatile Organics Scan. Attachment B contains a list of PAHs for analysis.
- (5) Oil and Grease shall be tested using EPA Method 1664, Revision A. This method was newly approved by EPA on May 14, 1999, and became effective on June 14, 1999, for inclusion in 40 CFR part 136.
- (6) Results from the Volatile Organics Scan for trichloroethylene may be used to satisfy the trichloroethylene sampling for two of the four required sampling events.
- (7) At least two of the sampling events each year shall be designed to occur during the application of deicing materials. These events shall attempt to collect a sample containing the maximum concentrations of deicing agents in the storm water.
- (8) The permittee shall report the primary deicing chemical on the DMR and shall monitor for that chemical when deicing occurs at the facility. The permittee shall also report when the deicing materials are not used.

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B. STORM WATER REQUIREMENTS - continued

- 5. The permittee shall maintain the oil/water separators to ensure proper operation. This shall include controlling the storm water flow rate through each oil/water separator to its maximum design flow rate by installing a continuous recording flow meter and manually controlling the flow through the separator within 180 days after the permit's effective date. Alternately, the permittee may request in writing that the Regional Administrator accept substitution of an alternative method of control for the continuous recording device within 180 days after the permit's effective date.
 - By installing a flow reduction or constriction device to prevent the flow through the separator from ever exceeding its maximum design flow rate or,
 - By demonstrating to EPA-New England that the operation procedures are sufficiently clear and rigid such that the operators will not exceed the separator's maximum design flow rate by concurrently draining more area(s) into the separator than prescribed in the procedures or;
 - By any other means of control that prevents the flow rate from exceeding the maximum design flow rater.

In addition, the permittee shall periodically clean, at a minimum annually, both the sediment/residuals (on the bottom of the separator) and the oil layers (on the top of the water within the separator) to prevent carryover of either layer in the effluent discharged from the oil/water separator. More frequent cleaning as necessary to ensure proper operation

The permittee shall continue to implement the Storm Water Pollution Prevention Plan (SWPPP) at the facility. The permittee shall maintain a SWPPP which includes Best Management Practices. The following minimum components shall be addressed in the plan:

- 6. The SWPPP shall be prepared in accordance with good engineering practice and shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges authorized by this permit.
- 7. The discharges from outfalls 001-004 shall be composed entirely of storm water. The following non-storm water discharges are authorized by this permit provided they are addressed in the SWPPP: fire fighting activities; fire hydrant flushings; potable water sources including waterline flushings; drinking fountain water, uncontaminated compressor condensate; irrigation drainage; lawn watering; routine external building washdown that does not use detergents or other compounds; pavement washwaters where spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensates; compressor condensate; uncontaminated springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.
- The SWPPP shall be signed in accordance with the requirements of Part II and be retained on site.

Page 13 of 18 Permit No. NH0090000

- 9. The Director, or authorized representative, may notify the permittee at any time that the plan does not meet one or more of the minimum requirements detailed below. Any notification shall identify those provisions of the permit that are not being met by the plan, and identify which provisions of the plan requires modification in order to meet the minimum requirements of this permit. The permittee shall make the required changes within 30 days of a notification and submit to EPA and NHDES a written certification that the required changes have been made.
- 10. The permittee shall amend the plan whenever there is a change in design construction, operation or maintenance, that has a significant effect on the potential for the discharge of pollutants or if the SWPPP is ineffective in eliminating or significantly minimizing pollutants from the sources identified in the SWPPP.
- 11. The SWPPP shall consider the following components as a minimum. The permittee may use the EPA's Storm Water Multi-Sector General Permit for Industrial Activities, Federal Register vol. 60, no.189, Friday September 29, 1995, pgs 51215-51219 as guidance. The SWPPP shall contain the following minimum elements:
 - a. Pollution Prevention Team
 - b. Description of potential pollutant sources including information on:
 - i. Drainage
 - ii. Inventory of exposed materials
 - iii. Spills and leaks
 - iv. Sampling data
 - v. Risk identification and summary of potential pollutant sources
 - c. Description of storm water measures and controls including:
 - i. Good house keeping
 - ii. Preventive maintenance
 - iii. Spill prevention and response procedures
 - iv. Source reduction
 - v. Management of runoff
 - vi. Inspections
 - vii. Pollution prevention training
 - viii. Record keeping and internal reporting procedures
 - ix. Identification of non-storm water discharges
 - x. Sediment and erosion control
- Comprehensive site compliance evaluation shall be performed annually. The evaluation shall include the following:
 - Areas contributing to storm water discharges shall be inspected visually for evidence of, or the potential for, pollutants to enter the drainage system.
 Structural storm water management measures etc. shall be evaluated to ensure proper operation.
 - b. Based on the results of the evaluation, the SWPPP shall be revised, if appropriate, within 2 weeks of the evaluation and shall provide a schedule for timely implementation of any changes to the plan.
 - A report of the results of the evaluation shall be made and retained as part of the SWPPP.

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C. SLUDGE CONDITIONS

The permittee shall comply with all existing federal (40 CFR part 503) and state (Env-Ws 800) laws and regulations that apply to sewage sludge use and disposal practices and with the Clean Water Act Section 405(d) technical standards.

If an applicable management practice or numerical limitation for pollutants in sewage sludge more stringent than existing federal and state regulations is promulgated under section 405(d) of the CWA, this permit shall be modified or revoked and reissued to conform to the promulgated regulations.

- The permittee shall comply with the more stringent of either the state or federal (40 CFR part 503) requirements.
- The requirements and technical standards of 40 CFR Part 503 apply to facilities which perform one or more of the following use or disposal practices.
 - a. Land application the use of sewage sludge to conditions or fertilize the soil
 - b. Surface disposal the placement of sewage sludge in a sludge only landfill.
 - c. Placement of sludge in a municipal solid waste landfill (see 40 CFR §503.4).
 - Sewage sludge incineration in a sludge incinerator.
- 4. The 40 CFR part 503 conditions do not apply to facilities which place sludge within a municipal solid waste landfill. These conditions also do not apply to facilities which do not dispose of sewage sludge during the life of the permit, but rather treat the sludge (lagoons, reed beds); or are otherwise excluded under 40 CFR §503.6.
- 5. The permittee shall use and comply with the attached Sludge Compliance Guidance document to determine appropriate conditions. Appropriate conditions contain the following elements:

General requirements

Pollutant limitations

Operation standards (pathogen reduction requirements and vector attraction reduction requirements)

Management practices

Record keeping

Monitoring

Reporting

Depending on the quality of material produced by a facility all conditions may not apply to the facility.

Page 15 of 18 Permit No. NH0090000

6. The permittee shall monitor the pollutant concentrations; pathogen reduction; and vector attraction reduction at the following frequency. This frequency is based upon the volume of sewage sludge generated at the facility in dry metric tons per year.

less than 290 1/year 290 to less than 1,500 1/quarter 1,500 to less than 15,000 6/year 15,000 or more 1/month

- The permittee shall sample the sewage sludge using the procedures detailed in 40 CFR §503.8.
- The permittee shall submit an annual report containing the information specified in the Sludge Compliance Guidance document. Reports are due annually by February 19th. Reports shall be submitted to the addresses contained in Section D of the permit.

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D. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Form(s) (DMRs) postmarked no later than the 15th day of the month following the completed period.

A signed and dated original DMRs and all other reports required herein, shall be submitted to the Director at the following address:

U.S. Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114-8127

Duplicate signed copies of all reports and information required herein shall be submitted to the State of New Hampshire at:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Eureau
6 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

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E. STATE PERMIT CONDITIONS

- The permittee shall comply with the following conditions which are included as State Certification requirements.
 - a. The pH range of 6.5-8.0 Standard Units (S.U.) must be achieved in the final effluent unless the permittee can demonstrate to NHDES-WD: (1) that the range should be widened due to naturally occurring conditions in the receiving water or (2) that the naturally occurring receiving water pH is not significantly altered by the permittee's discharge. The scope of any demonstration project must receive prior approval from NHDES-WD. In no case, shall the above procedure result in pH limits outside of the range of 6.0 to 9.0 S.U., which is the federal effluent limitation guideline regulation for pH for secondary treatment and is found in 40 CFR §133.102(c).
 - b. Pursuant to State Law NH RSA 485-A:13 and the New Hampshire Code of Administrative Rules, Env-Ws 706.08(b) and Env-Ws 904.08 the following submissions shall be made to the NHDES-WD by a municipality proposing to accept into its POTW (including sewers and interceptors):
 - (I) A 'Sewer Connection Permit' request form for:
 - i. Any proposed sewerage, whether public or private;
 - ii. Any proposed wastewater connection or other discharge in excess of 5,000 gallons per day;
 - iii. Any proposed wastewater connection or other discharge to a wastewater treatment facility operating in excess of 80% of design flow capacity; and
 - iv. Any proposed connection or other discharge of industrial wastewater, regardless of quality or quantity.
 - (2) An 'Industrial Discharge Permit Request Application' for any new or increased loadings of industrial waste, as defined in RSA 485-A:2, VI.
 - c. The permittee shall not at any time, either alone or in conjunction with any person or persons, cause directly or indirectly the discharge of waste into the said receiving water unless it has been treated in such a manner as will not lower the legislated water quality classification or interfere with the uses assigned to said water by the New Hampshire Legislature (RSA 485-A:12).
 - d. Any modifications of the Permittee's Sewer-Use Ordinance, including local limitations on pollutant concentrations, shall be submitted to the NHDES-WD for approval prior to adoption by the permittee.
 - e. Within 90 days of the effective date of this permit, the permittee shall submit to NHDES-WD a copy of its current sewer-use ordinance and a copy of any other document granting legal authority to issue permits to industries discharging industrial waste to the municipal wastewater treatment plant.

Page 18 of 18 Permit No. NH0090000

F. SPECIAL CONDITIONS

1. Whole Effluent Toxicity Test Frequency Adjustment

The permittee may submit a written request to the EPA requesting a reduction in the frequency (to not less than once per year) of the required toxicity testing. This request may be made after completion of a minimum of four successive (4) toxicity tests on the effluent. All of the tests must be valid tests and must demonstrate compliance with the permit limits for whole effluent toxicity. The permittee must continue to perform the testing at the frequency specified in the permit until written notification is received by certified mail from the EPA which indicates that the whole effluent toxicity testing requirement has been changed.

2. pH Limit Adjustment

The permittee may submit a written request to EPA recuesting a change in the permitted pH range. The permittee may not request a change which is less restrictive than 6.0 to 9.0 standard units range found in the National Effluent Limitation Guideline for this facility (secondary treatment regulations at 40 CFR part 133). The permittee's written request must include the State's approval letter containing an original signature (no copies). The State's letter shall assert that the permittee has demonstrated to the State's satisfaction that as long as discharges to the receiving water from a specific outfall are within a specific numeric pH range, the naturally occurring receiving water pH will be unaltered. The letter must specify for each outfall the associated numeric pH limit range. The permittee must continue to meet the pH limit contained in the permit until written notification is received by certified mail from the EPA indicating the pH limit has been changed.

The sample IICEP letter following was distributed to the list below:

- Carole Copeyon, U.S. Fish and Wildlife Service, Pennsylvania Field Office, 315 S Allen St, Ste 322, State College, PA 16801
- Kathy Frankel, Pennsylvania Department of Conservation and Natural Resources, 301 Fifth Ave, Ste 324, Pittsburgh, PA 15222-2420
- Susan McDonald, Federal Aviation Administration, Harrisburg Airports District Office, 3905 Hartzdale Dr, Ste 508, Camp Hill, PA 17011
- Jeffrey Ziegler, Moon Township Administration Office, 1000 Beaver Grade Rd, Moon Township, PA 15108
- Christopher Caruso, Township of Findlay, 1271 Route 30, PO Box W, Clinton, PA 15026
- Rich Belotti, Pittsburgh International Airport, Landside Terminal, 4th Floor Mezzanine, PO Box 12370, Pittsburgh, PA 15231-0370
- Craig Peters, 911th Air Wing, U.S. Air Force Reserve, Pittsburgh International Airport, 2475 Defense Ave, Coraopolis, PA 15108-2983
- Bud Jameson, Jr., 316th Expeditionary Sustainment Command, 99 Soldiers Ln, Coraopolis, PA 15108-2550
- Scott A. Hans, U.S. Army Corps of Engineers, 2200 William S. Moorhead Federal Building, 1000 Liberty Ave, Pittsburgh, PA 15222-4186
- Barbara Rudnick, U.S. EPA, Region 3, Office of Environmental Programs (3EA30), Environmental Assessment and Innovation Div, 1650 Arch St, Philadelphia, PA 19103-2029
- Bradley D. Penrod, Allegheny County Department of Aviation, Pittsburgh International Airport, PO Box 12370, Pittsburgh, PA 15231-0370
- Sandra Etzel, Allegheny County Health Department, Air Quality Program, 301 39th St, Bldg 7, Pittsburgh, PA 15201
- Lou Sitio, U.S. Army Corps of Engineers, North Atlantic Division, 302 General Lee Ave, Brooklyn, NY 11252
- The Honorable Robert Casey, Jr., U.S. Senate, 393 Russell Senate Office Bldg, Washington, DC 20510
- The Honorable Patrick Toomey, U.S. Senate, 502 Hart Senate Office Bldg, Washington, DC 20510
- The Honorable Matt Smith, Pennsylvania Senate, Senate Box 203037, Harrisburg, PA 17120-3037
- The Honorable Mark Mustio, Pennsylvania House of Representatives, 1009 Beaver Grade Rd, Ste 220, Moon Township, PA 15108
- The Honorable Anthony Celeste, Mayor of Coraopolis, 1121 Third Ave, Coraopolis, PA 15108
- The Honorable Tom Corbett, Office of the Governor, 301 5th Ave, Rm 240, Pittsburgh, PA 15222
- The Honorable Tim Murphy, House of Representatives, 2332 Rayburn House Office Bldg, Washington, DC 20515

Sample Pittsburgh ANGS IICEP Letter



NATIONAL GUARD BUREAU

3501 FETCHET AVENUE JOINT BASE ANDREWS MD 20762-5157

NGB/A7AM 16 Sep 13

Kathy Frankel Natural Resource Program Supervisor Pennsylvania Department of Conservation and Natural Resources 301 Fifth Ave, Ste 324 Pittsburgh, PA 15222-2420

Dear Ms. Frankel

The United States Air Force (USAF) plans to replace the existing KC-135 aerial refueling fleet with the KC-46A, which will be a new aircraft to the USAF's fleet. As such, the USAF has identified locations for the beddown of a formal training unit (FTU) and the first main operating base (MOB 1), which will both be led by active duty units. The USAF will also beddown the KC-46A at the second main operating base (MOB 2), which will be led by an Air National Guard (ANG) unit.

There are two separate Environmental Impact Statements (EISs) being prepared for the MOB 1/FTU¹ and MOB 2 aircraft beddowns. While you may be familiar with either or both of these actions, this particular letter is in reference only to the MOB 2 beddown action.

The MOB 2 alternative locations for this beddown include:

- Forbes Air National Guard Station (ANGS), Kansas;
- Joint Base McGuire-Dix-Lakehurst (JB MDL), New Jersey;
- Pease ANGS, New Hampshire;
- Pittsburgh ANGS, Pennsylvania; and,
- Rickenbacker ANGS, Ohio.

The EIS is being prepared under the National Environmental Policy Act (NEPA) for the potential beddown of the KC-46A at one of the five alternative locations, including Pittsburgh ANGS in Pennsylvania. The EIS will assess the potential environmental consequences associated with the beddown of the KC-46A at Pittsburgh ANGS as a replacement to the KC-135. As a result of the Proposed Action, there would be a change to the type of aircraft based at the selected installation; a change to the mix of aircraft using the associated airspace; changes to staffing and manpower at the selected location; changes to the number of airfield operations; as well as minor required construction, building renovation, and facility demolition. There would be no new or modified airspace required to support this undertaking.

-

¹ The FTU alternative installations include Altus Air Force Base (AFB), Oklahoma and McConnell AFB, Kansas. The MOB 1 alternative installations include Altus AFB, Oklahoma; McConnell AFB, Kansas; Fairchild AFB, Washington; and Grand Forks AFB, North Dakota.

Sample Pittsburgh ANGS IICEP Letter

Page 2

At Pittsburgh ANGS, the KC-46A would replace the KC-135 currently based at the installation. Under this alternative, the KC-46A would operate in existing airspace in a similar manner as is currently conducted. There may be a slight increase in operations in the airspace; however, use of this airspace is generally 10,000 feet above ground level and higher, and preliminary analysis indicates that noise levels under the proposal would be similar to existing noise levels with the KC-135 aircraft. Therefore, the National Guard Bureau (NGB) anticipates the area of potential effect for this action to be limited to the portion of the installation where construction, demolition, and renovation activities would occur.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [USC] 4321 *et seq.*), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and Air Force policy and procedures (32 CFR Part 989), the NGB is preparing an EIS in support of this action.

Included as an attachment with this letter is a CD that contains the first two chapters of the EIS: the purpose and need for the action, and the Description of the Proposed Action and Alternatives (DOPAA). We invite you to review these two chapters and provide comments. Your comments are important to us, in that they will help us to identify potential issues associated with implementation of the proposal. We will also send you the Draft EIS upon its release, which is anticipated in early 2014. We will continue to send you updates and information related to this action unless you request otherwise.

The NGB previously sent you a letter indicating that a scoping meeting at Pittsburgh ANGS was to be held Tuesday, June 4, 2013 at both 2-4 p.m. and 6-9 p.m. in Moon Township, Pennsylvania and invited you to attend this informational meeting. This letter also documented that the formal scoping period was May 17 through July 5, 2013. Notices for the scoping meeting were posted and published in the *Tribune Review* on May 26 and June 2, 2013. If you would like the NGB to consider your comments for inclusion in the Draft EIS, please forward your comments to the KC-46A MOB2 Project Manager, Ms. Anne Rowe, at NGB/A7AM, Shepperd Hall, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or email to ang.env.comments@ang.af.mil within 30 days of this notification.

If you have any questions regarding this consultation, please contact Ms. Anne Rowe. She can be reached at (240) 612-8636 or anne.rowe.ctr@ang.af.mil.

Sincerely

ROBERT L. DOGAN, GS-13, REM Plans and Requirements Branch

TIM MURPHY
18TH DISTRICT, PENNSYLVANIA

COMMITTEE ON ENERGY AND COMMERCE CHAIR, DERSIGHT AND INVESTIGATIONS ENVIRONMENT AND ECONOMY HEALTH



Co-Chair, STEEL CAUCUS
Co-Chair, MENTAL HEALTH CAUCUS

Weesme: murphy.house.gov

Congress of the United States House of Representatives Washington, DC 20515

October 11, 2013

Lt. Gen. Stanley Clarke Director U.S. Air Force National Guard Bureau 1000 Air Force Pentagon Washington, D.C. 20330

Dear Lt. Gen. Clarke,

As the National Guard Bureau solicits public comment pursuant to an Environmental Impact Statement for selection of the second main operating base (MOB-2) for the KC-46A refueling tanker, I offer my input on the advantages of the 171st Pennsylvania Air National Guard station at Pittsburgh International Airport. As it is located in the 18th congressional district, which I have the honor of representing in Congress, I have long worked on issues related to the 171st and appreciate the opportunity to offer my insight.

Choosing the 171st as the MOB-2 for the KC-46A will not result in a negative impact on the environment for a number of reasons. First, the land surrounding both the 171st and the airfield has already been prepared for development, and a significant buffer zone exists between the airport and residential neighborhoods. Since the installation is located within one of the fifty busiest commercial airports in the country, flight paths for the KC-46A are already in place to minimize noise and disruption. As well, the Air Force is unlikely to incur any significant costs related to land acquisition or infrastructure needs. The Allegheny County Airport Authority is reviewing the possibility of widening Tramps to accommodate larger KC-46As and building a direct access road between the 171st and 911th Air Reserve Station, which has additional dining and lodging facilities.

At the federal, state, and local levels, elected officials and the community have worked vigorously to build a favorable climate for the military to remain and thrive in the region. Western Pennsylvania demonstrates unrivaled support for the 171st and our nation's Air Force. The airport property is now home to several military installations and disaster response units, helping to facilitate emergency preparedness operations with local law enforcement and joint-training exercises required by military planners. For example, the 171st works cooperatively with the adjacent Air Reserve unit: the 911th Airlift Wing. The 316th Army Reserve is also located on airport property and a new Navy Operations and Support Center is under construction on the grounds of the 911th. In addition, a new DECA Commissary and a new Post Exchange serving tens of thousands of eligible and retired military families are opening in May 2014. These projects illustrate that both

9332 Raymonn House Ornoe Bollows Wasteng tide OC 20515 (202) 225-2301 FAX, 1762, 126-4844 1 504 WASHINGTON ROAD Phitisburgh, PA 10205 (412) 344 5583 FAZ (4121 429-5092

... 2040 Findsenskoper Place Radine 136 Gelendstand, PA 35603 - 124-356-7012 FA 4 1778 865-7015 Lt. Gen. Stanley Clarke October 11, 2013 Page 2

community support and the required military infrastructure are in place for the 171st to serve as the future home of the KC-46A.

I welcome the opportunity to discuss further with you why the 171st is uniquely situated to serve as MOB-2, and stand ready to provide any additional information to assist in your decision-making process.

Thank you for your service to the nation.

Sincerely,

Tim Murphy Member of Congress

TM:bdg

CC: Ms. Anne Rowe, National Guard Bureau



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

October 31, 2013

Ms. Anne Rowe KC-46A MOB2 Project Manager NGB/A7AM Shepperd Hall 3501 Fetchet Avenue Joint Base Andrews, MD 20762-5157

RE: Description of the Proposed Action and Alternatives Environmental Impact Statement Second Main Operating Base KC-46A Beddown at Alternative Air National Guard Installation

Dear Ms. Rowe:

In accordance with the National Environmental Policy Act (NEPA) of 1969 and Section 309 of the Clean Air Act and Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1508), the U.S. Environmental Protection Agency (EPA) has reviewed the Description of Proposed Action and Alternatives (DOPAA) for the Proposed Draft Environmental Impact Statement for the Second Main Operating Base KC-46A Beddown at Alternative Air National Guard Installations. EPA has comments on the DOPAA which are enclosed in the "Technical Comment" document.

Thank you for providing EPA with the opportunity to review this project. If you need assistance in the future, the staff contact for this project is Karen DelGrosso; she can be reached at 215-814-2765.

Sincerely,

Barbara Rudnick NEPA Team Leader

Office of Environmental Programs

Enclosure (1)

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Customer Service Hotline: 1-800-438-2474

Technical Comments

CHAPTER 1

Page 1-3 states, "In support of TFI (total force integration), an active duty associate unit would be integrated with ANG personnel and equipment under any of the action alternatives, enabling joint training and execution of missions using ANG-assigned aircraft." Please explain what this means as it relates to the requirements of the Proposed Action. Is the active duty associate unit (and all that it involves) included in the Proposed Action? Will the active duty associate unit require more staff/personnel, resources, etc.? If this is a necessary component to the Proposed Action, please distinguish and describe its requirements and address if it is accounted for and included in the environmental analysis at each of the proposed sites.

Page 1-5, Table 1.3-1 (Comparison of KC-135 and KC-46A) indicates 3 crewmembers for the KC-46A. However, Fact Sheet #2 for KC-46A Tanker (page 1-7) states that the aircrew compartment includes 15 permanent seats for aircrew which includes permanent seating for the Boom Operator and an air refueling instructor. It can be assumed that a minimum of 3 crewmembers are necessary for each operation, but more crewmembers can participate in the operation. To better understand the operation and military personnel needed/per operation, please specify required crewmembers for each KC-46A operation and the possibility of additional crewmembers that may likely participate in each operation.

Page 1-8 states, "KC-46A aircrews at the selected MOB 2 installation would complete operational sorties as part of their global reach missions and local training sorties to maintain proficiency in the aircraft." Can it be assumed then that the number of sorties would be different depending on the alternative site location? Please confirm/explain.

CHAPTER 2

Page 2-3 states, "Under the Proposed Action, the 12 PAA KC-46A aircraft would fly 670 hours per aircraft, per year, for a total of 8,040 hours annually. Thus, with an average sortie duration (ASD) of 4.0 hours, the KC-46A aircraft would fly 2,010 sorties annually." When reviewing the tables for each of the action alternatives (Tables 2.3-2, 2.3-8, 2.3-14, 2.3-19, 2.3-26 and Tables (2.3-3, 2.3-9, 2.3-15, 2.3-20, 2.3-27), "operations" not "sorties" are measured for comparing site locations. In addition, the "Total Proposed KC-46A Annual Airfield Operations" for each site is different. Can sorties be added to these tables or used in additional tables since it is the criteria used to describe the KC-46A Operations as stated above and outlined in 2.1.2.4?

Page 2-44 and 2-45: Please mention within Chapter 2 and/or discuss in detail in subsequent chapters the historical significance of Hangar 302 and Hangar 320 and if/how the additions proposed would affect hangars if found to be historically significant.

\$\mathcal{C}\text{printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.}\$
Customer Service Hotline: 1-800-438-2474

The sample IICEP letter following was distributed to the list below:

Teresa Spagna, U.S. Army Corps of Engineers, Huntington District, 502 Eighth St, Huntington, WV 25701-2070 Ohio Environmental Protection Agency, Lazarus Government Center, 50 W Town St, Ste 700, Columbus, OH 43215

U.S. Environmental Protection Agency, Region 5, 77 W Jackson Blvd, Chicago, IL 60604

Mary Knapp, Fish and Wildlife Service, 4625 Morse Rd, Ste 104, Columbus, OH 43230-8355

Lee Brown, Franklin County Economic Development & Planning Department, 150 S Front St, FSL Ste 10, Columbus, OH 43215

Columbus Regional Airport Authority, 4600 International Gateway, Columbus, OH 43219

Columbus Regional Airport Authority, Rickenbacker International Airport, Administrative Offices, 7161 Second St, Columbus, OH 43217

Dan Garver, Ohio Natural Resource Conservation Service, Pickaway County, Circleville Service Center, 110 Island Rd, Ste D, Circleville, OH 43113-9575

Ohio Department of Health, 246 N High St, Columbus, OH 43215

Columbus Health Department, 240 Parsons Ave, Columbus, OH 43215

Ohio Department of Transportation, District 6, 400 E William St, Delaware, OH 43015

Pickaway County Office of Development and Planning, 124 W. Franklin St, Circleville, OH 43113

Ohio Department of Natural Resources, Division of Geological Survey, 2045 Morse Rd, Bldg C1, Columbus, OH 43229-6693

Ohio Department of Natural Resources, Division of Wildlife, 2045 Morse Rd, Bldg G, Columbus, OH 43229-6693 Ohio Department of Natural Resources, Division of Soil & Water, 2045 Morse Rd, Bldg B-3, Columbus, OH 43229-6693

John Ankrom, City of Circleville Planning and Zoning Commission, 104 E Franklin St, Circleville, OH 43113

Katie Delaney, Federal Aviation Administration, 11677 S Wayne Rd, Ste 107, Romulus, MI 48174

The Honorable Sherrod Brown, U.S. Senate, 713 Hart Senate Office Bldg, Washington, DC 20510

The Honorable Rob Portman, U.S. Senate, 448 Russell Senate Office Bldg, Washington, DC 20510

The Honorable Steve Stivers, House of Representatives, 1022 Longworth HOB, Washington, DC 20515

The Honorable Heather Bishoff, Ohio House of Representatives, 77 S High St, 10th Fl, Columbus, OH 43215

The Honorable Kevin Bacon, Ohio Senate, 1 Capitol Square, Ground Floor, Columbus, OH 43215

The Honorable John Kasich, Office of the Governor, 77 S High St, 30th Fl, Columbus, OH 43215-6117

The Honorable Michael Coleman, Mayor of Columbus, City Hall, 2nd Fl, 90 W Broad St, Columbus, OH 43215

Sample Rickenbacker ANGS IICEP Letter



NATIONAL GUARD BUREAU

3501 FETCHET AVENUE JOINT BASE ANDREWS MD 20762-5157

16 Sep 13 NGB/A7AM

Teresa Spagna U.S. Army Corps of Engineers **Huntington District** 502 Eighth St Huntington, WV 25701-2070

Dear Ms. Spagna

The United States Air Force (USAF) plans to replace the existing KC-135 aerial refueling fleet with the KC-46A, which will be a new aircraft to the USAF's fleet. As such, the USAF has identified locations for the beddown of a formal training unit (FTU) and the first main operating base (MOB 1), which will both be led by active duty units. The USAF will also beddown the KC-46A at the second main operating base (MOB 2), which will be led by an Air National Guard (ANG) unit.

There are two separate Environmental Impact Statements (EISs) being prepared for the MOB 1/FTU¹ and MOB 2 aircraft beddowns. While you may be familiar with either or both of these actions, this particular letter is in reference only to the MOB 2 beddown action.

The MOB 2 alternative locations for this beddown include:

- Forbes Air National Guard Station (ANGS), Kansas;
- Joint Base McGuire-Dix-Lakehurst (JB MDL), New Jersey;
- Pease ANGS, New Hampshire;
- Pittsburgh ANGS, Pennsylvania; and,
- Rickenbacker ANGS, Ohio.

The EIS is being prepared under the National Environmental Policy Act (NEPA) for the potential beddown of the KC-46A at one of the five alternative locations, including Rickenbacker ANGS in Ohio. The EIS will assess the potential environmental consequences associated with the beddown of the KC-46A at Rickenbacker ANGS as a replacement to the KC-135. As a result of the Proposed Action, there would be a change to the type of aircraft based at the selected installation; a change to the mix of aircraft using the associated airspace; changes to staffing and manpower at the selected location; changes to the number of airfield operations; as well as minor required construction, building renovation, and facility demolition. There would be no new or modified airspace required to support this undertaking.

¹ The FTU alternative installations include Altus Air Force Base (AFB), Oklahoma and McConnell AFB, Kansas. The MOB 1 alternative installations include Altus AFB, Oklahoma; McConnell AFB, Kansas; Fairchild AFB, Washington; and Grand Forks AFB, North Dakota.

Sample Rickenbacker ANGS IICEP Letter

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At Rickenbacker ANGS, the KC-46A would replace the KC-135 currently based at the installation. Under this alternative, the KC-46A would operate in existing airspace in a similar manner as is currently conducted. There may be a slight increase in operations in the airspace; however, use of this airspace is generally 10,000 feet above ground level and higher, and preliminary analysis indicates that noise levels under the proposal would be similar to existing noise levels with the KC-135 aircraft. Therefore, the National Guard Bureau (NGB) anticipates the area of potential effect for this action to be limited to the portion of the installation where construction, demolition, and renovation activities would occur.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [USC] 4321 *et seq.*), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and Air Force policy and procedures (32 CFR Part 989), the NGB is preparing an EIS in support of this action.

Included as an attachment with this letter is a CD that contains the first two chapters of the EIS: the purpose and need for the action, and the Description of the Proposed Action and Alternatives (DOPAA). We invite you to review these two chapters and provide comments. Your comments are important to us, in that they will help us to identify potential issues associated with implementation of the proposal. We will also send you the Draft EIS upon its release, which is anticipated in early 2014. We will continue to send you updates and information related to this action unless you request otherwise.

The NGB previously sent you a letter indicating that a scoping meeting at Rickenbacker ANGS was to be held Thursday, June 6, 2013 at both 2-4 p.m. and 6-9 p.m. in Columbus, Ohio and invited you to attend this informational meeting. This letter also documented that the formal scoping period was May 17 through July 5, 2013. Notices for the scoping meeting were posted and published in the *Columbus Dispatch* on May 26 and June 2, 2013. If you would like the NGB to consider your comments for inclusion in the Draft EIS, please forward your comments to the KC-46A MOB2 Project Manager, Ms. Anne Rowe, at NGB/A7AM, Shepperd Hall, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or email to ang.env.comments@ang.af.mil within 30 days of this notification.

If you have any questions regarding this consultation, please contact Ms. Anne Rowe. She can be reached at (240) 612-8636 or anne.rowe.ctr@ang.af.mil.

Sincerely

ROBERT L. DOGAN, GS-13, REM Plans and Requirements Branch

----Original Message-----

From: Spagna, Teresa D LRH [mailto:Teresa.D.Spagna@usace.army.mil]

Sent: Tuesday, October 01, 2013 11:29 AM To: ANGRC/NGB/A7A NEPA COMMENTS

Subject: review of United States Air Force document (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Ms. Anna Rowe National Guard Bureau/A7AM Sheppard Hall 3501 Fetchet Avenue Joint Base Andrews, MD 20762-5157

Dear Ms. Rowe:

I refer to the document titled "Description of the Proposed Action and Alternatives Environmental Impact Statement Second Main Operating Base KC-46A Beddown at Alternative Air National Guard Installations" and dated September 2013. The Environmental Impact Statement (EIS) is being prepared under the National Environmental Policy Act (NEPA) for the potential beddown of the KC-46A at one of the five alternative locations, including the Rickenbacker Air National Guard Station (ANGS) in Ohio. The provided document describes the United States Air Force purpose and need for the proposed action and the description of the proposed action and alternatives. You have requested the United States Army Corps of Engineers (Corps) review the provided document and provide comments.

The Corps has completed its review of the provided document. The EIS should thoroughly evaluate the effects of the project on areas within the Corps' regulatory jurisdiction. The Corps' authority to regulate waters of the United States is based, in part, on the definitions and limits of jurisdiction contained in 33 CFR 328 and 33 CFR 329. Section 404 of the Clean Water Act requires that a Department of the Army permit be obtained prior to the discharge of dredged or fill material into waters of the United States, including wetlands. Section 10 of the Rivers and Harbors Act of 1899 requires that a Department of the Army permit be obtained for any work in, on, over or under a navigable water. If is determined that the proposed action would result in the discharge of dredged and/or fill material into waters of the United States or work in, on, over or under a navigable water, Corps' authorization under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899 would be required. In this regard, to ensure the information presented in EIS is adequate to fulfill the Corps' statutory requirements, including the requirements of 404(b)(1) of the Clean Water Act and the Corps' public interest review, the Corps the topics listed in Enclosure 1 should be scoped and evaluated in the EIS.

Thank you for allowing the Corps to provide comments on the provided document. We look forward to working with the United States Air Force as a cooperating agency for any NEPA document where Huntington District Corps has jurisdiction by law. If you have any questions, please give me a call at 304-399-5210 or by email at teresa.d.spagna@usace.army.mil .	
Sincerely,	
Teresa D. Spagna Regulatory Project Manager North Branch Classification: UNCLASSIFIED Caveats: NONE	

Enclosure 1

- 1) Aquatic Resource Identification. The NEPA documents(s) must include a site-specific identification of all aquatic resources within the proposed project areas, including any aquatic resources within proposed construction, building renovation, and facility demolition areas. The identification should include a description of any streams, open water features and wetlands. The identification of aquatic resources within the project area must be based on field observations and field data. The identification must include a wetland delineation for each site prepared in accordance with the Corps' 1987 Wetland Delineation Manual (87 Manual) and any applicable Regional Supplement to the 87 Manual. This information would be required to determine the effects of the projects on aquatic resources.
- 2) Avoidance and minimization. A fundamental precept of the Corps' Regulatory Program under Section 404 of the Clean Water Act is that the discharge of dredged and/or fill material into waters of the United States will be avoided and minimized, where it is practicable to do so. Under Section 404 of the Clean Water Act, only the least environmentally damaging practicable alternative would receive Corps authorization. An alternative is practicable if it is available and capable of being done after taking into consideration cost, logistics and existing technology in light of overall project purposes. The NEPA document(s) should evaluate how the projects were designed to avoid and minimize the discharge of dredged and/or fill material into waters of the United States. The alternatives analysis section of the NEPA document(s) should analyze on-site avoidance and minimization alternatives and avoidance and minimization alternatives for any off-site borrow, spoil and mitigation areas.
- 3) Compliance with the 404(b)(1) Guidelines. The Section 404(b)(1) Guidelines (Guidelines) are the substantive criteria used in evaluating discharges of dredged and/or fill material under Section 404 of the Clean Water Act. The Guidelines are published at 40 CFR Part 230. The fundamental precept of the Guidelines is that discharges of dredged and/or fill material into waters of the United States, including wetlands, should not occur unless it can be demonstrated that such discharges, either individually or cumulatively, will not result in unacceptable adverse effects on the aquatic ecosystem. Subpart B of the Guidelines establishes the four conditions which must be satisfied in order to make a finding that a proposed discharge of dredged or fill material complies with the Guidelines. These conditions generally state:
 - a. No discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences;
 - b. No discharge of dredged or fill material shall be permitted if it:
 - Causes or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable State water quality standard; Violates any applicable toxic effluent standard or prohibition under section 307 of the Act;

- ii. Jeopardizes the continued existence of species listed as endangered or threatened under the Endangered Species Act of 1973, as amended, or results in likelihood of the destruction or adverse modification of a habitat which is determined by the Secretary of Interior or Commerce, as appropriate, to be a critical habitat under the Endangered Species Act of 1973, as amended; and
- iii. Violates any requirement imposed by the Secretary of Commerce to protect any marine sanctuary designated under title III of the Marine Protection, Research, and Sanctuaries Act of 1972:
- c. No discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States. Under these Guidelines, effects contributing to significant degradation considered individually or collectively, include:
 - Significant adverse effects of the discharge of pollutants on human health or welfare, including but not limited to effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites;
 - ii. Significant adverse effects of the discharge of pollutants on life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, and spread of pollutants or their byproducts outside of the disposal site through biological, physical and chemical processes;
 - iii. Significant adverse effects of the discharge of pollutants on aquatic ecosystem diversity, productivity, and stability. Such effects may include, but are not limited to, loss of fish and wildlife habitat or loss of the capacity of a wetland to assimilate nutrients, purify water, or reduce wave energy; or
 - Significant adverse effects of discharge of pollutants on recreational, aesthetic and economic values.

Findings of significant degradation related to the proposed discharge are based upon appropriate factual determinations, evaluations, and tests required by Subparts B and G of the Guidelines, after consideration of subparts C through F, with special emphasis on the persistence and permanence of the effects outlined in those subparts; and

- d. No discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.
- 4) Corps public interest review factors. The Corps must evaluate the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Among the factors that must be evaluated as part of the Corps' public interest review include: conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplains values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, energy needs, safety, food and fiber production, mineral needs, water quality, considerations of property ownership, air and noise impacts, and, in general, the needs and welfare of the

- people. (See 33 CFR 320.4) These factors should be scoped and evaluated in the NEPA document(s);
- 5) Effects to Aquatic Resources. The NEPA document(s) should quantify the anticipated impacts to waters of the United States, both temporary and permanent, resulting from activities within the Corps jurisdiction. Waters of the United States could include: perennial, intermittent and ephemeral streams; rivers; lakes; ponds; and wetlands. For rivers and streams, the quantity should be described in linear feet and in acreage. For wetlands, this quantity should be described by acreage. The NEPA document(s) should also describe the wetland classification (e.g. palustrine, forested, scrub-shrub or emergent). The NEPA document should differentiate between permanent and temporary impacts and must describe any permanent conversion in the wetland classification (e.g. palustrine forested to palustrine emergent, etc.);
- Cumulative and Indirect Effects. The cumulative and indirect impacts on aquatic resources resulting from the projects should be scoped and evaluated in the NEPA document(s);
- 7) **Off-Site Areas**. The NEPA document(s) should include an analysis of the environmental effects to any off-site borrow, spoil or mitigation areas;
- 8) Compliance with Other Federal Laws. The NEPA document(s) should document compliance with:
 - a. Section 106 of the National Historic Preservation Act (NHPA). The NEPA document(s) must describe compliance with Section 106 of the NHPA and must describe the research efforts undertaken to identify historic properties within the project areas, including any off-site borrow, spoil and mitigation areas. The NEPA document(s) should use site-specific collected data in the identification of historic properties within the project areas;
 - b. **Section 7 of the Endangered Species Act**. The Corps suggests United States Air Force contact the United States Fish and Wildlife Service for a list of federally-protected species; and
 - Section 401 of the Clean Water Act. The NEPA document(s) must describe compliance with Section 401 of the Clean Water Act.

Original Message From: Tebbe, Sarah [mailto:Sarah.Tebbe@dnr.state.oh.us] Sent: Wednesday, October 02, 2013 5:03 PM To: Rowe, Anne M CTR USAF ANG NGB/A7AM; ANGRC/NGB/A7A NEPA COMMENTS Cc: Kessler, John Subject: KC-46A MOB 2 Replacement EIS Rickenbacker ANGS Hi Anne,
We have received your notification and have no further comments on the proposed action.
Thanks,
Sarah Tebbe
ODNR office of REALM
Phone: 614 265 6397



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